Lehigh Hanson
HEIDELBERGCEMENT Group

24001 Stevens Creek Blvd.
Cupertino, CA 95014
(408) 996-4000

December 31, 2020

**VIA ELECTRONIC MAIL**

Ms. Lindsay Whalin, MS, PG
Engineering Geologist
Groundwater Protection Division
San Francisco Bay RWQCB
1515 Clay Street
Suite 1400
Oakland, CA 94612

Re: ***Lehigh Southwest Cement Company - Permanente Quarry and Cement Plant***
***2020 Semiannual and Annual Monitoring Report***

Dear Ms. Whalin:

Enclosed, please find the 2020 Second Semi-Annual and Annual Monitoring Report for the Lehigh Permanente Cement Plant and Quarry per Waste Discharge Requirements Order No. R2-2018-0028 and the Self-Monitoring Program (SMP) issued by the San Francisco Bay Regional Water Quality Control Board on December 2, 2020.

The monitoring report includes the first semiannual sampling event conducted under the SMP. The monitoring indicates that a measurably significant indication of a release has not occurred and that conditions are generally consistent, or improved from, historical results dating back to 2015. As noted in the report, we request that the reporting deadline for the first and second semiannual reports (and annual report) be changed from June 30 and December 31 to July 31 and January 31, respectively.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Erika Guerra

Erika Guerra
Environmental & Land Resources Director

Cc: Tressa Jackson, Area Environmental Manager, Lehigh Southwest Cement Company
Nicole Granquist, Downey Brand LLP

**REPORT**

# 2020 SECOND SEMI-ANNUAL AND ANNUAL MONITORING REPORT

*Lehigh Permanente Cement Plant and Quarry, Waste Discharge Requirements No. R2-2018-0028*

Submitted to:

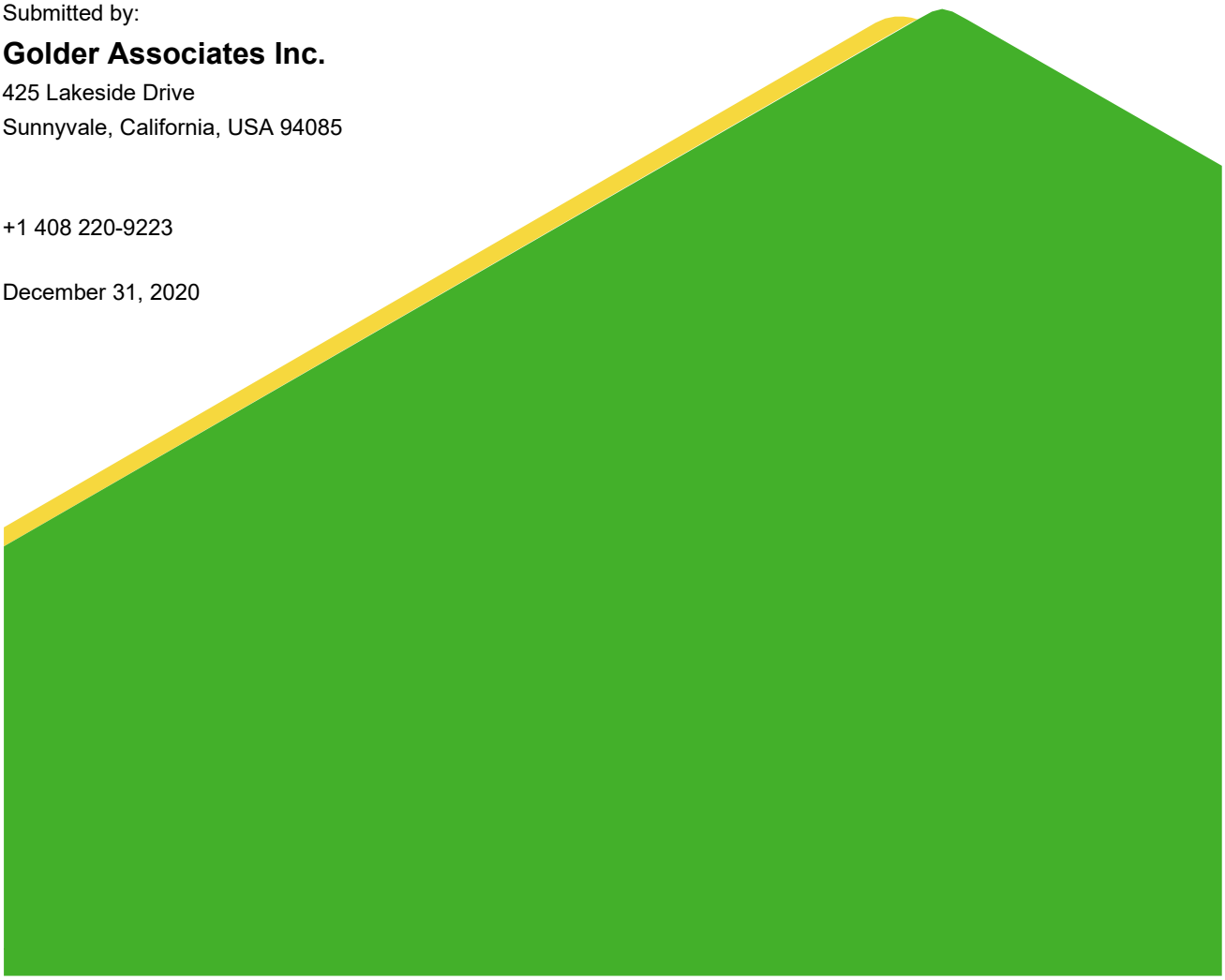
**Lehigh Southwest Cement Company**
24001 Stevens Creek Boulevard
Cupertino, California
Attention: Erika Guerra

Submitted by:

**Golder Associates Inc.**
425 Lakeside Drive
Sunnyvale, California, USA 94085

+1 408 220-9223

December 31, 2020



# Table of Contents

**1.0 INTRODUCTION ..... 1**

**2.0 BACKGROUND ..... 1**

2.1 Site Description ..... 1

2.2 Hydrogeology ..... 2

2.2.1 WMSA ..... 2

2.2.2 EMSA ..... 2

**3.0 MONITORING PROGRAM ..... 3**

3.1 Monitoring Details ..... 3

3.1.1 Constituents of Concern and Monitoring Parameters ..... 3

3.1.2 Monitoring Locations ..... 4

3.1.3 Monitoring and Reporting Schedule ..... 5

3.2 Sample Collection ..... 5

3.3 Laboratory Methods ..... 6

3.4 WMSA ..... 6

3.5 EMSA ..... 6

3.6 Vertical Hydraulic Gradients ..... 7

**4.0 SAMPLING AND ANALYSIS ..... 8**

4.1 WMSA ..... 8

4.1.1 Detection Monitoring ..... 8

4.1.2 Surface Water and Seeps ..... 9

4.2 EMSA ..... 9

4.2.1 Detection Monitoring ..... 9

4.2.2 Surface Water Results ..... 10

4.3 Quality Control ..... 10

4.4 Previous Results ..... 11

**5.0 COMPLIANCE EVALUATION SUMMARY AND DISCUSSION ..... 11**

5.1 Facility and Containment Inspections ..... 11

5.2 Corrective Action Monitoring ..... 12
5.3 Monitoring Results Summary and Recommendations ..... 12

## Tables

Table 1 Constituents of Concern and Monitoring Parameters (in text)
Table 2 Monitoring Locations (in text)
Table 3 Monitoring and Reporting Schedule (in text)
Table 4 Well and Piezometer Construction Details
Table 5 Groundwater Elevations
Table 6 Vertical Hydraulic Gradients
Table 7 Detection Monitoring Results
Table 8 Field Parameters

## Figures

Figure 1 Regional Location Map
Figure 2 Site Overview
Figure 3 Site Plan
Figure 4 WMSA Groundwater Elevation Contour March 2020
Figure 5 WMSA Groundwater Elevation Contour June 2020
Figure 6 WMSA Groundwater Elevation Contour September 2020
Figure 7 WMSA Groundwater Elevation Contour December 2020
Figure 8 EMSA Groundwater Elevation Contour March 2020
Figure 9 EMSA Groundwater Elevation Contour June 2020
Figure 10 EMSA Groundwater Elevation Contour September 2020
Figure 11 EMSA Groundwater Elevation Contour December 2020
Figure 12 Vertical Hydraulic Gradients (in text)
Figure 13 Select Analytical Results
Figure 14 WMSA Selenium Results (in text)
Figure 15 EMSA Selenium Results (in text)
Figure 16 EMSA-DMW-9 Historical Arsenic Results (in text)

## Appendices

Appendix A Field Data Sheets
Appendix B Hydrographs
Appendix C Laboratory Analytical Reports
Appendix D First Quarter 2020 Summary and Data
Appendix E Inspection Reports
Appendix F Corrective Action Monitoring

# 1.0 INTRODUCTION

Golder Associates Inc. (Golder) on behalf of Lehigh Southwest Cement Company (Lehigh) has prepared this 2020 Second Semi-Annual and Annual Monitoring Report to summarize the sampling events that occurred during the 2020 monitoring periods. Results of the monitoring program, including groundwater flow and elevation data, sampling methods, and analytical data are included. This report also provides a summary of the annual reporting requirements as outlined in Waste Discharge Requirements (WDR, No. R2-2018-0028, Hanson Permanente Cement Inc. and Lehigh Southwest Cement Company, Permanente Quarry and Cement Plant).

The monitoring program was initially completed in accordance with the October 2014 Workplan to investigate the site hydrogeology underlying the Lehigh Permanente Cement Plant and Quarry located at 24001 Stevens Creek Boulevard in Santa Clara County, California (Figure 1).[1] The quarterly sampling program was continued per the WDRs issued pursuant to California Code of Regulations (CCR) 27 (Title 27) and section 13263 of the California Water Code (CWC) for the Lehigh Permanente facility (Site) in Santa Clara County, California. The San Francisco Bay Regional Water Quality Control Board (Water Board) adopted the WDRs for the Site on June 13, 2018. Per WDR Specifications, Lehigh was to continue with monitoring activities according to the approved groundwater monitoring Workplan from October 2014 until the Self-Monitoring Program (SMP) prepared pursuant to the WDRs was approved. Lehigh submitted the SMP along with the Conceptual Site Model (CSM) update in January 2020 and the documents were revised in May 2020. Approval of the SMP was received on December 2, 2020.[2]

The first semi-annual event was completed in September 2020 based on correspondence[3] with the Water Board and followed the proposed SMP. There were no significant variations in sampling schedule, locations, and parameters from the September 2020 event and the final SMP. This report also includes the results of the first quarter 2020 sampling conducted under the original program. The second quarter 2020 sampling was not required while the SMP was in the approval process based on concurrence from the Water Board.

# 2.0 BACKGROUND

## 2.1 Site Description

The Site occupies a portion of a 3,510-acre property owned by Hanson Permanente Cement, Inc., and operated by Lehigh Southwest Cement Company (collectively, Lehigh). The Site is in the unincorporated foothills of western Santa Clara County, approximately two miles west of the City of Cupertino. The main operational areas comprise approximately 570 acres and include the Quarry, East Materials Storage Area (EMSA), West Materials Storage Area (WMSA), and the Cement Plant. Additional structures located at the Site include a building that once housed an aluminum plant, a wastewater treatment plant, and an aggregate (rock) plant (Figure 2).

[1] Golder Associates, October 2014, Workplan (Revision 2) Site Groundwater Characterization and Detection Monitoring Program, Lehigh Permanente Facility.

[2] Water Board, Concurrence and Approval of Self-Monitoring Program, Permanente Quarry and Cement Plant (Lehigh), Cupertino, Santa Clara County.

[3] Water Board email to Lehigh, dated June 15, 2020.

## 2.2 Hydrogeology

The following describes the hydrogeology of the WMSA and EMSA. A more detailed discussion is provided in the CSM Update submitted in January 2020.

The WMSA and EMSA are in discrete hydrologic sub-basins (predominately south-flowing side canyons to Permanente Creek). These sub-basins are separate and distinct from the sub-basin where the Quarry is excavated, and other sub-basins that exist at the Site. Groundwater levels and flow directions are controlled primarily by the terrain and geology of each sub-basin.

### 2.2.1 WMSA

Much of the WMSA is underlain by the Jurassic–Cretaceous age Franciscan Formation; in particular, a subduction zone assemblage of highly-deformed, variably-metamorphosed marine shale and oceanic crust-related submarine basaltic greenstone. This unit is highly weathered with moderate to high iron oxidation near the surface and increases in competency with depth. Within the saturated zone, the unit is generally unoxidized, greyish green with calcite veining and/or clay infill. Most of the borings in the WMSA encountered Franciscan greenstone.

First encountered groundwater was within the native materials; no water was present within the overburden material when the wells were installed in 2015. In 2017, well WMSA-DMW-11A located in the WMSA Yeager Yard (YY) area was installed in overburden. Water present in WMSA-DMW-11A is likely perched and not representative of shallow groundwater. The thickness of the overburden material varies across the WMSA with most overburden material evident for the wells within the center of the WMSA, such as WMSA-DMW-5 and WMSA-DMW-6, and the least amount for the wells on the perimeter of the WMSA along the two main ridgelines, such as WMSA-DMW-1S, -6A, -9, and -10 (*i.e.,* as would be expected with a canyon fill).

The upper part of the Franciscan formation is low to moderately water-bearing because of weathering and limited secondary porosity and transmissivity. The shallow wells along Permanente Creek, WMSA-DMW-3S and -8S, are moderately transmissive; however, the deeper well of the well pair (WMSA-DMW-3D and -8D), which are screened in more competent bedrock, are much less transmissive. WMSA-DMW-12S/12D installed along the northern portion of the WMSA as part of the 2020 CSM update work also had a lower hydraulic conductivity for the deep interval compared to the shallow interval.

### 2.2.2 EMSA

The EMSA is underlain by a combination of alluvium, Santa Clara Formation, and Franciscan Formation. The majority of alluvium was encountered at locations EMSA-DMW-1S/1D and EMSA-DMW-9; which are in close proximity to the active Permanente Creek channel. These deposits are comprised of a mixture of cobbles, gravels, sand, silt and clay, underlain by Franciscan shale. The unconsolidated, coarse-grained nature of the alluvial deposits makes them more transmissive than the Franciscan Formation as evident by the EMSA-DMW-1S/1D well pair. Well EMSA-DMW-1S is screened in the alluvium and exhibits a much higher transmissivity than EMSA-DMW-1D, which is screened in the Franciscan Shale. Well pair EMSA-DMW-10S/10D installed downgradient of WMSA-DMW-8 as part of the CSM update work also had very low hydraulic conductivities for both intervals.

With the exception of EMSA-DMW-6 where it was not evident, the Santa Clara Formation overlies Franciscan Formation within the limits of the EMSA. The Santa Clara Formation is a continental fluvial and alluvial deposit that is composed of unconsolidated to slightly consolidated conglomerate, sandstone, and siltstone. Santa Clara Formation high in unconsolidated conglomerates can have moderate to high transmissivity; however, the Santa Clara Formation encountered at the EMSA contained more sandstone and siltstone with a high silt content. The high silt content led to a lower transmissivity than anticipated and the wells have a poor yield.

While drilling the borings in the EMSA, the majority of the borings had to be left open for several days to allow for water to enter. Similar to the WMSA, no water was encountered in the overburden material for the locations within the EMSA boundary. Several locations within the EMSA are under confining conditions.

Background location BKGD-1 encountered a stratigraphy typical to that of a Franciscan Mélange deposit: folded and faulted layers of highly weathered Franciscan rocks, including metabasalt, greenstone, shale, and limestone. Background location BKGD-2 encountered a 45-ft thick deposit of unconsolidated to slightly consolidated alluvium originating from the Permanente Creek basin, underlain by Franciscan basement rock. The weathered Franciscan greenstone and metabasalt conglomerate in this area had extremely low hydraulic conductivity across the water bearing zone.

# 3.0 MONITORING PROGRAM

The following summarizes the monitoring program based on Part B of the SMP.

## 3.1 Monitoring Details

### 3.1.1 Constituents of Concern and Monitoring Parameters

The constituents of concern, laboratory methods, and monitoring parameters are summarized on the following table.

**Table 1: Constituents of Concern and Monitoring Parameters**

| Parameter | Method | Reporting Limit (µg/L)[1] | Concentration Limit (µg/L)[2] |
|---|---|---|---|
| **Constituents of Concern** | | | |
| Dissolved CAM17 Metal(loid)s plus Aluminum | EPA 6020B/200.8 EPA 1631E (Hg) | | |
| Hexavalent Chromium (Dissolved) | EPA 218.6 | | |
| Cyanide | 335.4/9010 | | |
| Nitrate as N | EPA 353.2 | | |
| Carbonate and Bicarbonate | EPA 310.1 | | |
| Chloride, Nitrate, Sulfate, Fluoride | EPA 300.0 | | |
| Calcium, Magnesium, Sodium, Potassium | EPA 6010B/200.7 | | |
| Sulfide | EPA 376.2/SM45000SD | | |
| TPH as diesel and motor oil | EPA 8015 | | |
| TPH as gasoline | EPA 8015 | | |
| VOCs | EPA 8260B or 624 | | |
| SVOCs | EPA 8270/SIM or 625 | | |
| Pesticides | EPA 8081 | | |
| **Monitoring Parameters** | | | |
| Arsenic (dissolved) | EPA 6020B/200.8 | 2.0 | 10 [3] |
| Cadmium (dissolved) | EPA 6020B/200.8 | 0.25 | 0.25 |
| Copper (dissolved) | EPA 6020B/200.8 | 2.0 | 9 |
| Molybdenum (dissolved) | EPA 6020B/200.8 | 1.0 | 100 |
| Nickel (dissolved) | EPA 6020B/200.8 | 2.0 | 52 |
| Selenium (dissolved) | EPA 6020B/200.8 | 2.0 | 5 |
| Vanadium (dissolved) | EPA 6020B/200.8 | 3.0 | 19 |
| Zinc (dissolved) | EPA 6020B/200.8 | 1.7 | 120 |

Notes:

1. Analytical methods for the constituents of concern shall be capable of quantifying results at a Reporting Limit no greater than the Concentration Limit.
2. The Concentration Limit is the lower of the California primary maximum contaminant level or Freshwater Aquatic water quality criteria, which are published in the most recent version the San Francisco Bay Water Boards Environmental Screening Levels. The most recent Environmental Screening Levels must be used as Concentration Limits for each monitoring event (and reflected in monitoring reports) and therefore, the Concentration Limits are not shown for the Constituents of Concern.
3. The Concentration Limit for arsenic at monitoring well EMSA-DMW-8 is not achievable as background levels in this geologic formation are above 10 µg/L.

### 3.1.2 Monitoring Locations

The following table summarizes the monitoring locations, type, and purpose. The monitoring locations are depicted on Figure 3.

**Table 2: Monitoring Locations**

| WMU | Monitoring Location | Type | Notes |
|---|---|---|---|
| WMSA WMU | WMSA-DMW-3S<br>WMSA-DMW-10<br>WMSA-DMW-8S<br>WMSA-DMW-13* | Point of Compliance (POC) | POC monitoring wells located downgradient of WMU |
| | WMSA-DMW-4,<br>WMSA-DMW-5,<br>WMSA-DMW-11A | Overburden | Overburden monitoring well, primarily within WMU |
| | WMSA-SW-C<br>WMSA-SW-D<br>WMSA-SW-E | Surface Water | Aid in monitoring of groundwater/ surface water interaction |
| | WC-Seep-A<br>WC-Seep-B<br>WC-Seep-D<br>Seep 850<br>Seep 750 | Seep | Monitor northern limit of WMU<br><br>Monitor Quarry water quality |
| | WMSA-P6A<br>WMSA-DMW-1S<br>WMSA-DMW-2<br>WMSA-DMW-1D<br>WMSA-DMW-3D<br>WMSA-DMW-6<br>WMSA-DMW-8D<br>WMSA-DMW-12S<br>WMSA-DMW-12D<br>VWP-1, 2, 3 | Piezometers | Used to measure groundwater elevations only |
| EMSA WMU | EMSA-DMW-1S<br>EMSA-DMW-2S<br>EMSA-DMW-4S<br>EMSA-DMW-8<br>EMSA-DMW-9 | Point of Compliance (POC) | POC monitoring wells located downgradient of WMU |
| | EMSA-DMW-3<br>EMSA-DMW-5<br>EMSA-DMW-7 | Overburden | Overburden monitoring well, primarily within WMU |
| | EMSA-SW-A<br>EMSA-SW-D | Surface Water | Aid in monitoring of groundwater/surface water interaction |
| | GH-Seep-A<br>GH-Seep-B | Seep | Monitor northern limit of WMU |

| WMU | Monitoring Location | Type | Notes |
|---|---|---|---|
| | EMSA-P6A<br>EMSA-P7A<br>EMSA-DMW-6<br>EMSA-DMW-1D<br>EMSA-DMW-2D<br>EMSA-DMW-4D<br>EMSA-DMW-10S<br>EMSA-DMW-10D<br>BKGD-2 | Piezometers | Used to measure groundwater elevations only |

Notes:
* Well WMSA-DMW-13 will be installed first quarter 2021 and sampled as part of the first 2021 semi-annual sampling event.

### 3.1.3 Monitoring and Reporting Schedule

The following table summarizes the monitoring and reporting schedule.

**Table 3: Monitoring and Reporting Schedule**

| Monitoring Event | Frequency | Parameters |
|---|---|---|
| **COCs**<br><br>POC<br>Surface Water<br>Seeps<br>Overburden | Once every five years | Monitoring Parameters plus remaining CAM 17 Metal(loid)s (dissolved), hexavalent chromium (dissolved), and aluminum (dissolved)<br>Cyanide, VOCs, SVOCs<br>Total petroleum hydrocarbons (TPH-g, TPH-d, TPH-hydraulic oil)<br>Major cations (calcium, magnesium, sodium, and potassium)<br>Major anions ((carbonate, bicarbonate, chloride, nitrate (as N), and sulfate)) and fluoride and sulfide<br>Pesticides (surface water only) |
| **Monitoring Parameters**<br><br>POC<br>Surface Water<br><br>Seeps | Semi-Annually (March and September)<br><br>Semi-Annually (April and October) | Dissolved metals and metalloids: arsenic, cadmium, copper, molybdenum, nickel, selenium, vanadium, and zinc. |
| Wells and Piezometers | Quarterly | Groundwater elevations |
| Standard Observations and Facility Inspections | Quarterly | As detailed in SMP Part A |
| Reporting | Semi-annual Report Due: June 30 and December 31 | |

## 3.2 Sample Collection

Golder completed the semi-annual monitoring for the Monitoring Parameters in September and October 2020. Groundwater samples were collected using low-flow groundwater sampling procedures as previously described in the 2014 Workplan. Well and piezometer construction details are summarized in Table 4. Golder previously installed dedicated low-flow bladder pumps and tubing in each of the wells. As part of the sampling procedure, water levels and field water-quality parameters were measured at 3 to 5 minute intervals. Pumping

rates were less than 500 millimeters per minute (mL/min) and as low as 100 mL/min. Even at the lowest pumping rates, the water level in several wells continued to drawdown. Stabilization was considered complete when three successive readings were within the following limits:

- Specific Conductivity : ± 3% microSiemens per centimeter (µS/cm)
- pH: ± 0.2 standard unit
- Turbidity: ± 10% for values greater than 5 NTUs, or three readings below 5 NTUs
- Dissolved Oxygen (DO): ± 10% for values greater than 0.5 mg/L, or three readings below 0.5 mg/L
- Temperature: ± 3%
- Oxidation Reduction Potential (ORP): ± 10 millivolts (mV)

After field measurements stabilized, Golder collected the groundwater samples. Golder collected surface water samples by directly filling the appropriate sampling containers. Field measurements for pH, ORP, specific conductance, DO, temperature, and turbidity were recorded. Groundwater and surface water samples analyzed for dissolved metals were filtered in the field prior to filling the appropriate sample bottle. Field data sheets are included as Appendix A.

## 3.3 Laboratory Methods

All samples were properly preserved and stored on the day of sampling. Chain-of-custody documentation accompanied the samples through collection and delivery to the analytical laboratory. Analyses were performed by Alpha Analytical, a California state-certified analytical laboratory, for the parameters listed in Section 3.1. Groundwater elevation and Flow

Golder measured groundwater levels quarterly. To calculate groundwater elevations, the depths to water were subtracted from the surveyed top-of-casing elevations. Water elevations are summarized on Table 5. Hydrographs are included as Appendix B.

## 3.4 WMSA

Groundwater elevation ranged from 1,275 feet above mean sea level (amsl) by well pair WMSA-DMW-8 to 1,845 feet amsl by piezometer WMSA-P6A. Groundwater elevations were typically lower in the third and fourth quarters than the first and second quarters of 2020 as shown on the hydrographs. Several wells (*e.g.,* WMSA-DMW-2, -3S, -3D, and -5) displayed little change over the course of 2020.

Groundwater contours for each quarter of 2020 are shown on Figures 4 through 7. The groundwater elevation data indicate that groundwater from the western and northern parts of the WMSA flow to the south and southeast along the former drainage axis and then to WMSA-DMW-3S/3D, which is by Permanente Creek. Groundwater flow along the eastern portion of the WMSA is to the south and southwest toward WMSA-DMW-3S/3D and WMSA-DMW-8S/8D. Another divide is present along the eastern limit of the WMSA that is influenced by the quarry operational activities. The water elevation within the quarry center is approximately 550 feet above mean sea level (amsl) while it is over 1,600 and 1,200 feet amsl along the northwestern and eastern rims of the pit, respectively.

## 3.5 EMSA

Groundwater elevations in the EMSA range from 437 feet amsl by well EMSA-DMW-10S to 832 feet amsl by well EMSA-DMW-6. Groundwater elevations were typically lower in the third and fourth quarters than the first and second quarters of 2020. As noted on the hydrographs, elevations in several wells (*e.g.,* EMSA-DMW-2D,

-4S, -4D, -10S, -10D) increased from the first quarter to the fourth quarter, indicating lower recharge rates and/or lower permeability.

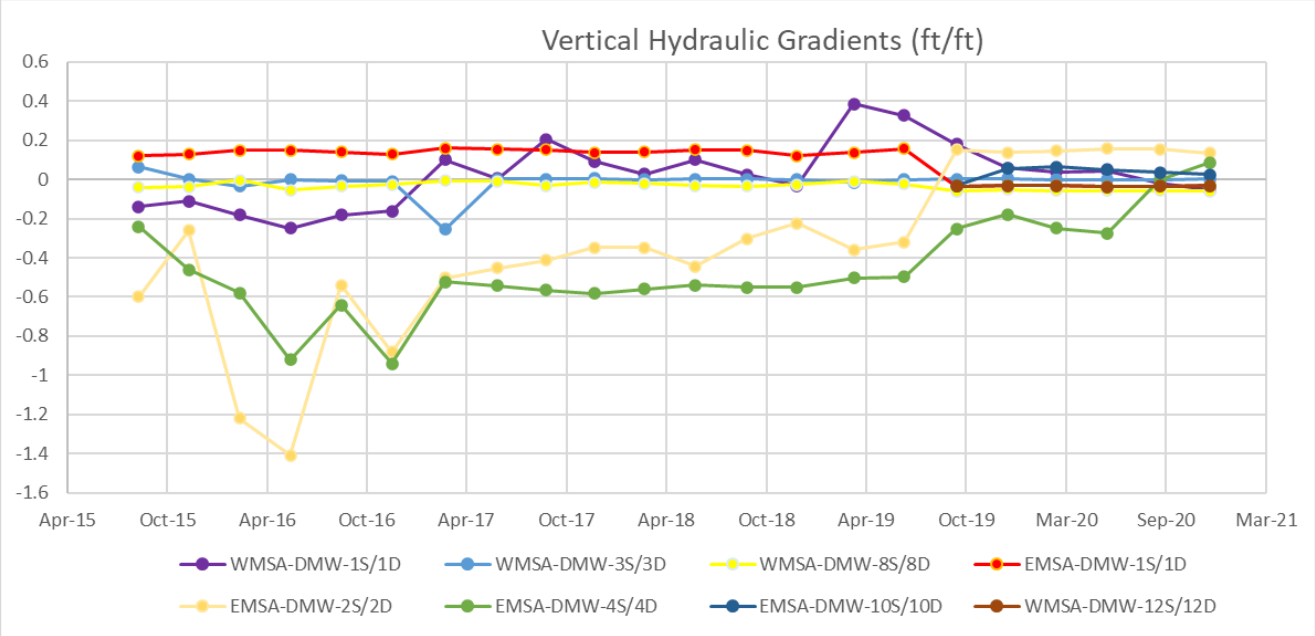
Groundwater contours each quarter of 2020 are shown on Figures 8 through 11. The groundwater contours are based on a series of triangulations of groundwater elevations between adjacent wells and the previously completed geophysical survey results. The EMSA sits astride two sub-drainage basins separated by a prominent north-south trending ridge (in yellow on figures). The western portion of the EMSA is situated in the area of former prominent side canyon historically known as Dry Canyon. Groundwater in this area flows toward the southwest into the Dry Canyon drainage, where, in turn it flows to the southeast toward wells EMSA-DMW-1S/1D and Permanente Creek. It is also known that some groundwater surfaces as seepage in the cement plant area either in below grade structures (e.g., basements below silos), or is intercepted by drainage trenches installed as part of the original site development of this prominent side-canyon. This groundwater seepage is collected and routed to the Cement Plant Reclaim Water System where it is utilized in manufacturing processes or it receives treatment before discharge.

The eastern portion of the EMSA is situated to the east of the north-south ridge in a separate sub-drainage basin that drains predominately to the south and east toward wells EMSA-DMW-2S, -2D, and -8 and then to Permanente Creek. Along the northern ridgeline, groundwater flow is to the north and northeast based on the 2015 geophysics survey results. Wells EMSA-DMW-4S and -4D are located on the northern side of the ridgeline; therefore, it is reasonable to infer that these wells monitor groundwater flow in this direction.

## 3.6 Vertical Hydraulic Gradients

Vertical hydraulic gradients for the various well pairs are summarized on Table 6 and shown graphically below.

**Figure 12: Vertical Hydraulic Gradient**




The well pairs display a less pronounced vertical gradient for 2020 than previous years. The well pairs displayed an upward vertical gradient over the past two quarters of 2020. The result may be from a decrease in the amount of precipitation and reduced infiltration compared to previous year.

# 4.0 SAMPLING AND ANALYSIS

Groundwater analytical results from September 2020 are summarized in Table 7 and described below. Appendix C contains the laboratory reports. Figure 13 depicts the results for select metals (arsenic, selenium, nickel, and molybdenum).

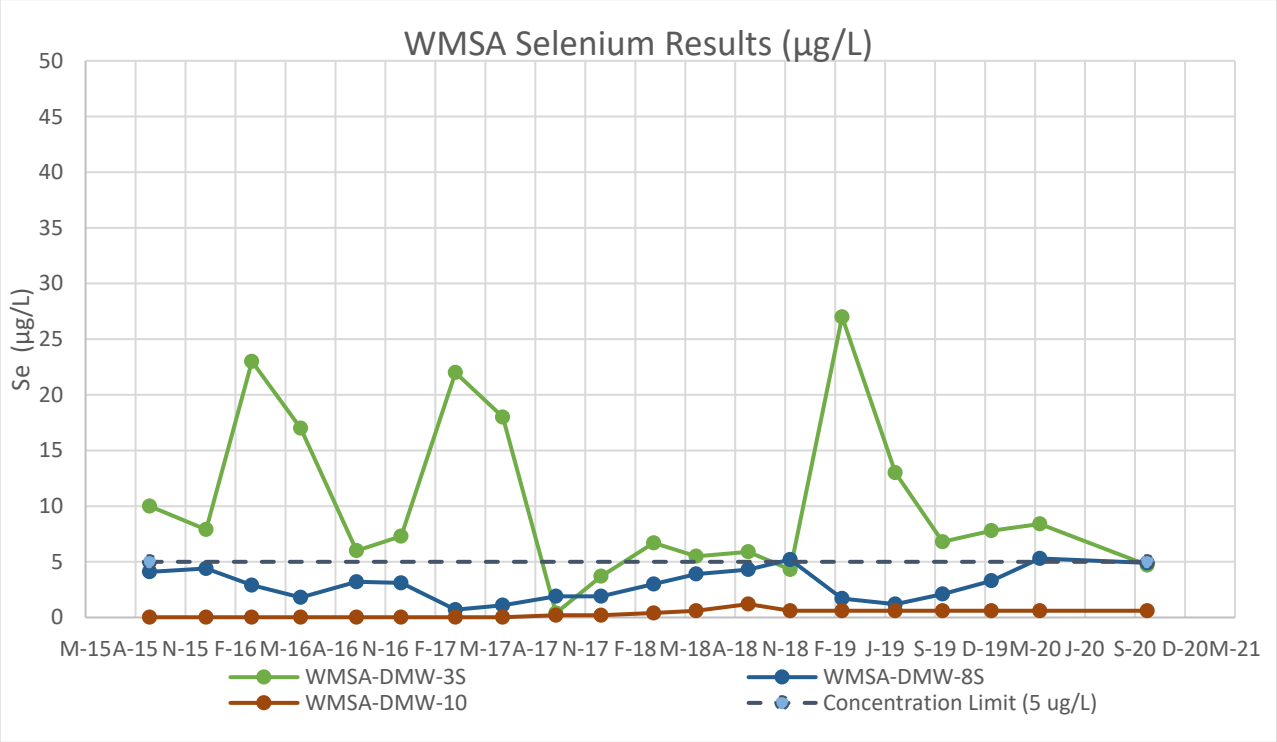
## 4.1 WMSA

### 4.1.1 Detection Monitoring

Selenium ranged from non-detect at WMSA-DMW-10 to 4.9 micrograms per Liter (µg/L) at WMSA-DMW-8S. Cadmium, copper, vanadium, and zinc were not detected above the laboratory detection limit. Molybdenum ranged from an estimated value of 0.80 µg/L to 4.6 µg/L (WMSA-DMW-10); arsenic ranged from non-detect to 5.4 µg/L (WMSA-DMW-3S); and nickel ranged from non-detect to 10 µg/L (WMSA-DMW-10). No metals were detected above the concentration limits in the WMSA detection monitoring wells.

The selenium results since 2015 are shown graphically on the following figure. Higher values for selenium typically coincide with March sampling events for well WMSA-DMW-3S.

**Figure 14: WMSA Selenium Results**




Field parameters recorded during sample collection are summarized on Table 8. Readings for pH ranged from 6.75 (WMSA-DMW-8S) to 7.60 (WMSA-DMW-10). Electrical conductivity ranged from 553 µS/cm (WMSA-DMW-10) to 1,935 µS/cm (WMSA-DMW-3S). Turbidity readings ranged from 1.19 NTU (WMSA-DMW-8S) to 2.40 NTU (WMSA-DMW-3S). ORP readings ranged from -134.5 mV (WMSA-DMW-10) to 175 mV (WMSA-DMW-8S) and DO readings ranged from 0.21 mg/L (WMSA-DMW-3S) to 4.26 mg/L (WMSA-DMW-8S) reflecting both aerobic and anaerobic groundwater.

### 4.1.2 Surface Water and Seeps

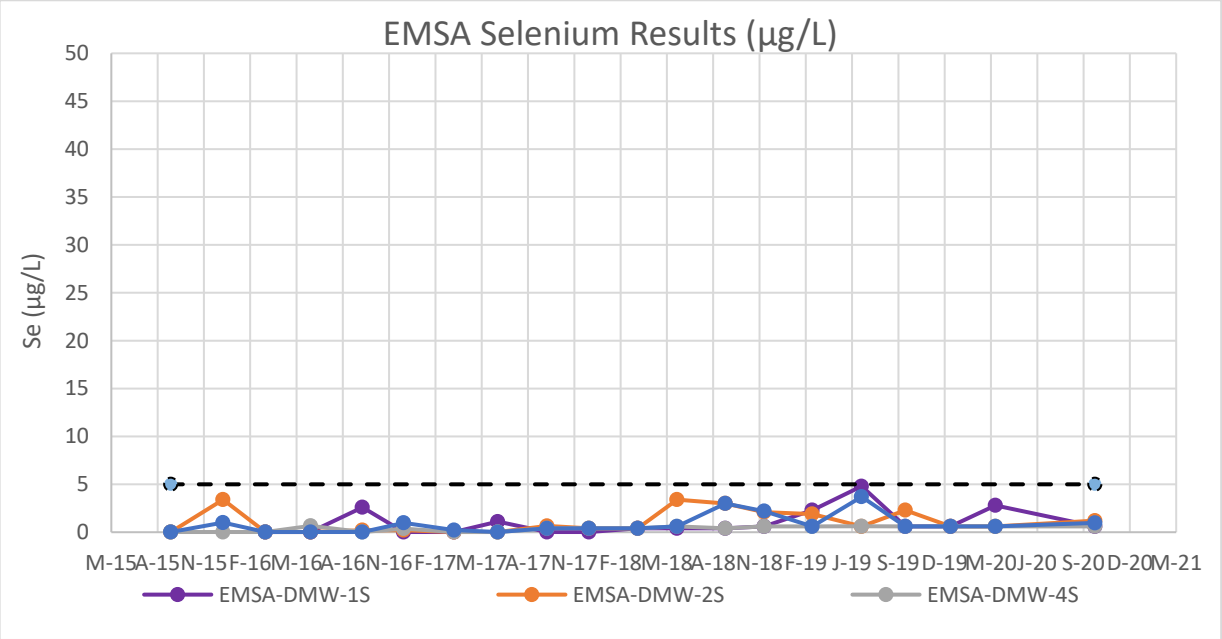
Surface water samples were collected from WMSA-SW-C and -D in September 2020. WMSA-SW-E and the seep locations were dry. Selenium was detected at 8.2 µg/L from WMSA-SW-C and 7.7 µg/L from WMSA-SW-D. The selenium concentrations are within the typical ranges detected at these locations and are *de minimus* as described in the CSM Update. No other metals were detected above the concentration limits.

## 4.2 EMSA

### 4.2.1 Detection Monitoring

Selenium ranged from non-detect at EMSA-DMW-8 to an estimated value below the laboratory reporting limit of 1.2 µg/L at EMSA-DMW-2S. The selenium results since 2015 are shown graphically on the following figure.

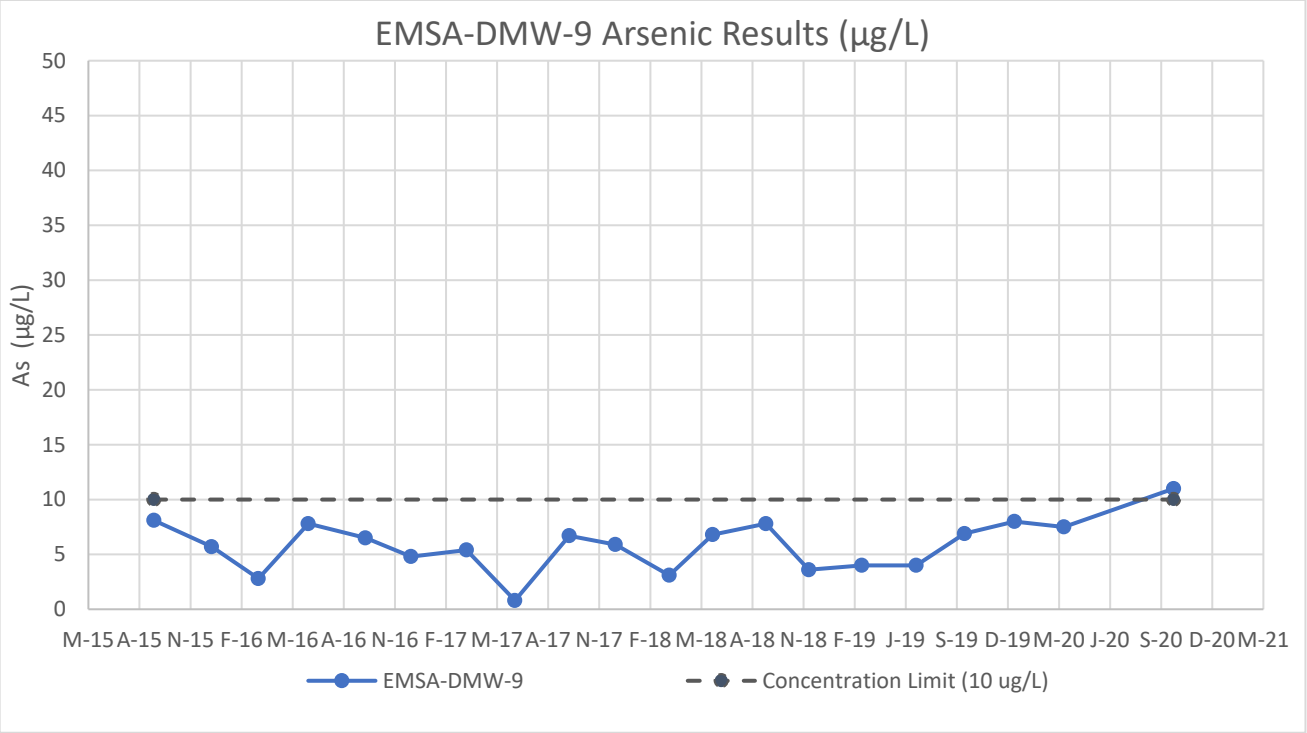
**Figure 15: EMSA Selenium Results**




Cadmium, vanadium, and zinc were not detected above the laboratory detection limit. Copper was detected at EMSA-DMW-8 at 5.3 µg/L and not detected at the other locations. Molybdenum ranged from 2.6 µg/L at EMSA-DMW-9 to 69 µg/L at EMSA-DMW-4S and nickel ranged from non-detect to 9.1 µg/L at EMSA-DMW-1S. Arsenic ranged from non-detect at EMSA-DMW-2S to 11 µg/L at EMSA-DMW-9. No metals were detected above the concentration limit except for arsenic at EMSA-DMW-9.

The arsenic result from EMSA-DMW-9 of 11 µg/L is slightly above the concentration limit of 10 µg/L. However, the result appears to be anomalous based on the previous 19 times EMSA-DMW-9 was sampled. From the historical dataset, arsenic concentrations ranged from non-detect to 8.1 µg/L with an average of 5.6 µg/L at EMSA-DMW-9. Figure 16 displays the arsenic data from this well.

**Figure 16: EMSA-DMW-9 Historical Arsenic Results**




EMSA-DMW-9 will continue to be monitored semi-annually. Per the SMP, a measurably significant indication of a release requiring evaluation is an exceedance of a Monitoring Parameter in two out of three consecutive monitoring events. Should arsenic continue to be detected at a level above 10 µg/L, the Water Board will be notified.

Field parameters recorded during sample collection are summarized on Table 8. Readings from groundwater monitoring wells for pH ranged from 6.46 (EMSA-DMW-9) to 8.34 (EMSA-DMW-4S). Electrical conductivity ranged from 627 µS/cm (EMSA-DMW-4S) to 4,694 µS/cm (EMSA-DMW-8). Turbidity ranged from 0.26 NTU (EMSA-DMW-1S) to 9.45 NTU (EMSA-DMW-2S). DO readings ranged from 0.21 mg/L (EMSA-DMW-8) to 0.94 mg/L (EMSA-DMW-9) ORP readings ranged from -82.1 mV (EMSA-DMW-8) to 45.9 mV (EMSA-DMW-1S) reflecting predominantly anaerobic groundwater.

### 4.2.2 Surface Water Results

A surface water sample was collected from EMSA-SW-D in September 2020. EMSA-SW-A and the seep locations were dry. Cadmium, copper, vanadium, and zinc were not detected above the laboratory detection limit. Selenium was detected at an estimated value of 1.4 µg/L, arsenic at an estimated value of 4.6 µg/L, molybdenum at 52 µg/L, and nickel at 7.8 µg/L. No metals were detected above the concentration limits.

## 4.3 Quality Control

The laboratory analytical results were deemed acceptable to meet the data quality objectives. The laboratory analyzes quality control (QC) samples (e.g., method blank, MS/MSD, duplicates, surrogate spikes, and laboratory control samples (LCS)) to verify that their analytical systems are in control during sample analysis. If the laboratory QC results do not meet the specific laboratory's QC goals then the samples are reanalyzed. Data meeting the laboratory's QC criteria are reported and submitted in the form of printed reports and electronic data deliverables (EDD). The laboratory validates all analytical results prior to reporting sample results. Detailed documentation of laboratory QC data is provided at the end of each certified analytical report.

Golder collected field QC samples consisting of duplicate samples as part of the sampling program. Equipment blanks were not collected as non-dedicated sampling equipment was not used. Two duplicate samples were collected to verify the precision of laboratory analysis and field sampling procedures. Each duplicate sample was collected at the same time as the corresponding primary sample and was analyzed for the same parameters. Duplicate results generally correlated well with the primary samples. The calculated relative percent difference (RPD) between the primary and duplicate sample results were less than or equal to 30 percent.

## 4.4 Previous Results

The first quarter 2020 sampling was completed under the former groundwater monitoring program.[4] Groundwater and surface water samples were collected and analyzed for total and dissolved metals, cyanide, VOCs, SVOCs, TPH, and Pesticides and PCBs (surface water only). For the seep locations, there was no to minimal flow present in the sample locations north of the WMSA and EMSA where all were dry except WC-Seep-A. Because of the minimal flow, WC-Seep-A was only sampled for metals. The tabulated data and the laboratory reports are included in Appendix D. The data was also uploaded to GeoTracker.

The results from the first quarter sampling are consistent with the previous quarterly results dating back to September 2015. No new parameters were detected and the detected parameters were within the historical data set range. For wells WMSA-DMW-3S and WMSA-DMW-8S, selenium was detected at 8.4 µg/L and 5.3 µg/L in March 2020 (Figure 14). The results are within detected ranges and consistent with the *de minimus* levels as described in the CSM Update. Selenium was not detected above 5 µg/L in the established detection monitoring wells in the WMSA or EMSA. Other detections of metals, including selenium, were noted for wells within the footprint of the WMSA and EMSA consistent with previous results.

# 5.0 COMPLIANCE EVALUATION SUMMARY AND DISCUSSION

## 5.1 Facility and Containment Inspections

Lehigh completed routine facility inspections, including standard observations, and containment inspections based on the Operations, Maintenance, Contingency (OM&C) Plan and the Stormwater Pollution Prevention Plan (SWPPP). The OM&C Plan and SWPPP were updated in January 2020 with submittal of the Corrective Action Plan (CAP) for the Yeager Yard (YY) area. The OM&C Plan was subsequently updated in December 2020 and submitted concurrently with this report.

A copy of the monthly facility and weekly containment inspection forms are included as Appendix E. No major deficiencies were noted by Lehigh during the inspection period of January 2020 through November 2020. The December 2020 inspection will be included with the 2021 Annual Report. Lehigh completed corrective measures as needed based on the inspections, and as noted on the inspection sheets.

In September 2020, Golder completed an annual inspection of the WMUs prior to the start of the wet season (Appendix E). The inspection included the WMSA and EMSA and conveyance infrastructure. No major deficiencies were observed and the containment structures at the EMSA (French drain) and WMSA (Sedimentation Pond) appeared to be in good condition. The pumps could not be tested because of the lack of water. Since the annual inspection, Lehigh, after receiving the correspondent authorizations, completed the construction of the permanent sediment basin between the YY area slope and Permanente Creek to intercept

[4] Golder Associates, October 2014, Workplan (Revision 2) Site Groundwater Characterization and Detection Monitoring Program, Lehigh Permanente Facility.

water flows and any related material. Collected water within the basin, similar to the temporary basin, is pumped to the Quarry via a HDPE pipeline for treatment before discharge under the NPDES permit. Findings of the inspection were used to update the OM&C Plan (December 2020). The OM&C Plan was also updated to align with the approved SMP.

## 5.2 Corrective Action Monitoring

Lehigh completed routine inspections of the YY Area from March 16, 2020 to November 30, 2020 per the CAP and OM&C Plan. No movement of the slide was observed during this period. A copy of the inspections is included in Stantec's Annual Slope Inspection Monitoring Summary, December 15, 2020 letter (Appendix F). No discharge of seeps from the YY area occurred during the year through November 30, 2020. The seep monitoring is reported under the NPDES program.

## 5.3 Monitoring Results Summary and Recommendations

The following provides a summary of the monitoring results and recommendations.

- The WMSA and EMSA are both in discrete hydrologic sub-basins (predominately south-flowing side canyons to Permanente Creek). These sub-basins are separate and distinct from the sub-basin where the Quarry was excavated, and other sub-basins that exist at the Site. Groundwater levels and flow directions are controlled primarily by the terrain and geology of each sub-basin. Flow directions and gradients for the past year were consistent with historical results.
- The more transmissive hydrogeologic units are found in the alluvium closer to Permanente Creek while the less transmissive units consist of the Santa Clara and Franciscan Formations located under the majority of the EMSA and WMSA. Groundwater was not encountered in the overburden material within the WMSA and EMSA at the time the wells were installed.
- Groundwater flow in the WMSA is controlled by the two main ridges that formed the side canyon that was present prior to the placement of overburden material. The predominant ridgeline that runs from west to east acts as a groundwater divide along the north margin of the WMSA. Groundwater south of this ridgeline flows to the south and southeast toward Permanente Creek and follows the former drainage axis. The southeastern ridge that forms the southern WMSA boundary acts as another divide to flow where groundwater on the north of this ridge flows to the east-northeast towards the center of the WMSA and then down to WMSA-DMW-3S/3D.
- Groundwater flow for the majority of the EMSA is to the south and southeast. Groundwater flow along ridge defined by the north margin of the EMSA is to the north and northeast; however, results from the wells in this area and annual seep samples north of the EMSA suggest that groundwater flowing to the north and northeast has not been impacted by site operations.
- No metals were detected above the concentration limit in the EMSA except for arsenic at EMSA-DMW-9. The arsenic result from EMSA-DMW-9 of 11 µg/L is slightly above the concentration limit of 10 µg/L. However, the result appears to be anomalous based on the previous 19 times EMSA-DMW-9 was sampled. The detection of arsenic at EMSA-DMW-9 will be further evaluated under the routine monitoring program.
- No metals were detected above concentration limits in surface water samples collected in the EMSA during the September sampling event.
- No metals were detected above the concentration limits in the WMSA detection monitoring wells during the September sampling event.

- Selenium was detected in surface water at 8.2 µg/L from WMSA-SW-C and 7.7 µg/L from WMSA-SW-D in September 2020. The selenium concentrations are within the typical ranges detected at these locations and are *de minimus* as described in the CSM Update. No other metals were detected above the concentration limits.
- In summary, monitoring conducted in 2020 indicates that a measurably significant indication of a release has not occurred and that conditions are generally consistent, or improved from, historical results dating back to 2015.
- We recommend, and request, that the reporting deadline for the first and second semi-annual reports (and annual report) be changed from June 30 and December 31 to July 31 and January 31, respectively. These dates would provide additional time for laboratory analyses and review of data.

## 6.0 CLOSING

This report has been prepared and reviewed by the undersigned.

**GOLDER ASSOCIATES INC.**

George C. Wegmann, PG, CHG
Senior Consultant

CERTIFIED HYDROGEOLOGIST
GEORGE C. WEGMANN
No. 1060
STATE OF CALIFORNIA

William L. Fowler, PG, CEG
Principal/Program Leader

# Tables

**Table 4: Well and Piezometer Construction Details**
**Lehigh Permanente Site**

| Piezometer/Well Designation | Coordinates x | y | Top of Casing Elevation (ft amsl) | Boring TD (ft bgs) | Screen Interval (ft bgs) | well completion date | PVC Casing (inch) |
|---|---|---|---|---|---|---|---|
| WMSA-DMW-1S | 6087205.0038 | 1945221.5380 | 1849.61 | 137 | 127-137 | 6/24/2015 | 2 |
| WMSA-DMW-1D | 6087180.1269 | 1945200.3429 | 1849.79 | 167 | 157-167 | 6/29/2015 | 2 |
| WMSA-DMW-2 | 6088645.7710 | 1943650.3220 | 1762.79 | 312 | 292-312 | 8/1/2015 | 2 |
| WMSA-DMW-3S | 6089301.8133 | 1942661.2092 | 1372.09 | 30 | 10-30 | 7/16/2015 | 2 |
| WMSA-DMW-3D | 6089291.8819 | 1942653.4260 | 1372.21 | 65 | 55-65 | 7/16/2015 | 2 |
| WMSA-DMW-4 | 6090729.2219 | 1944482.1730 | 1856.76 | 117 | 97-117 | 6/29/2015 | 2 |
| WMSA-DMW-5 | 6089312.2660 | 1943712.3911 | 1821.13 | 327 | 307-327 | 7/28/2015 | 2 |
| WMSA-DMW-6 | 6087520.4110 | 1944790.1130 | 1977.82 | 347 | 327-347 | 7/11/2015 | 2 |
| WMSA-DMW-7 | 6087466.9170 | 1943381.4302 | 1614.98 | 95 | 72-92 | 7/9/2015 | 2 |
| WMSA-DMW-8S | 6090028.7866 | 1941671.2873 | 1287.93 | 30 | 10-30 | 7/14/2015 | 2 |
| WMSA-DMW-8D | 6090031.4660 | 1941657.0081 | 1287.92 | 65 | 55-65 | 7/13/2015 | 2 |
| WMSA-DMW-9 | 6087418.6720 | 1944202.0870 | 1888.18 | 117 | 97-117 | 7/14/2015 | 2 |
| WMSA-DMW-10 | 6088222.3591 | 1943519.4460 | 1645.02 | 145 | 100-120 | 7/14/2015 | 2 |
| WMSA-DMW-11A | 6090916.8900 | 1942338.5490 | 1434.96 | 63 | 40-55 | 2/16/2018 | 2 |
| WMSA-DMW-12S | 6089663.1400 | 1944296.3490 | 1943.1 | 155 | 155-175 | 8/22/2019 | 2 |
| WMSA-DMW-12D | 6089665.2930 | 1944306.7720 | 1942.26 | 280 | 260-280 | 8/22/2019 | 2 |
| EMSA-DMW-1S | 6099880.5139 | 1942270.9619 | 555.16 | 52 | 32-52 | 6/19/2015 | 4 |
| EMSA-DMW-1D | 6099880.5139 | 1942270.9619 | 555.16 | 78 | 64-74 | 6/18/2015 | 4 |
| EMSA-DMW-2S | 6100395.8840 | 1943491.7541 | 558.37 | 70 | 49-69 | 4/28/2015 | 2 |
| EMSA-DMW-2D | 6100407.0850 | 1943511.6149 | 558.69 | 120 | 100-120 | 4/28/2015 | 2 |
| EMSA-DMW-3 | 6099590.9991 | 1943257.1020 | 719.1 | 117 | 97-117 | 5/6/2015 | 2 |
| EMSA-DMW-4S | 6099357.7742 | 1944237.9829 | 756.68 | 151 | 128-148 | 6/16/2015 | 2 |
| EMSA-DMW-4D | 6099318.6318 | 1944199.5726 | 760.14 | 200 | 175-200 | 6/19/2015 | 4 |
| EMSA-DMW-5 | 6098869.4251 | 1943646.6770 | 827.81 | 177 | 154-174 | 6/9/2015 | 2 |
| EMSA-DMW-6 | 6097574.3000 | 1943277.2781 | 912.34 | 127 | 107-127 | 5/29/2015 | 2 |
| EMSA-DMW-7 | 6098464.9082 | 1942840.7800 | 704.73 | 30 | 10-30 | 5/31/2015 | 2 |
| EMSA-DMW-8 | 6100783.4321 | 1944258.9389 | 556.33 | 199 | 164-184 | 4/30/2015 | 2 |
| EMSA-DMW-9 | 6100233.7349 | 1942811.4507 | 555.76 | 60 | 40-60 | 6/1/2015 | 4 |
| EMSA-DMW-10S | 6100893.4510 | 1944359.6610 | 557.13 | 120 | 100-120 | 8/15/2019 | 2 |
| EMSA-DMW-10D | 6100901.4530 | 1944366.2910 | 556.98 | 250 | 230-250 | 8/15/2019 | 2 |
| BKGD-2 | 6101154.2069 | 1943393.7871 | 512.86 | 194 | 151-191 | 6/8/2015 | 2 |
| EMSA-P6A | 6097806.7051 | 1942937.7791 | 860.92 | 127 | 107-127 | 5/6/2015 | 2 |
| EMSA-P7A | 6098935.4571 | 1943116.0019 | 771.5 | 340 | 317-340 | 5/5/2015 | 2 |
| EMSA-P8A | 6100088.8229 | 1943952.6360 | 645.94 | 215 | 193-213 | 5/22/2015 | 2 |
| WMSA-P6A | 6087038.8559 | 1944542.5630 | 1920.88 | 97 | 77-97 | 7/13/2015 | 2 |
| VWP-01 | 6089972 | 1943573 | 1814.25 | 290 | 251 | 8/23/2019 | VWP |
| VWP-02 | 6089988 | 1942709 | 1614.92 | 125 | 108 | 8/19/2020 | VWP |
| VWP-03 | 6091190 | 1942665 | 1468.56 | 115 | 100 | 8/13/2020 | VWP |

Notes: VWP are vibrating wire piezometers, the VWP TOC = ground surface elevation

**Table 5: Groundwater Elevations**
**Lehigh Permanente Site**



| Well ID | Top of Casing (ft amsl) | Depth to Water (ft TOC) March 2020 | GW Elevation (ft amsl) March 2020 | Depth to Water (ft TOC) June 2020 | GW Elevation (ft amsl) June 2020 | Depth to Water (ft TOC) Sept 2020 | GW Elevation (ft amsl) Sept 2020 | Depth to Water (ft TOC) Dec 2020 | GW Elevation (ft amsl) Dec 2020 |
|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW1S | 555.16 | 41.66 | 513.50 | 42.90 | 512.26 | 44.16 | 511.00 | 43.22 | 511.94 |
| EMSA-DMW1D | 555.16 | 37.73 | 517.43 | 38.67 | 516.49 | 39.97 | 515.19 | 39.60 | 515.56 |
| EMSA-DMW2S | 558.37 | 25.70 | 532.67 | 25.45 | 532.92 | 31.56 | 526.81 | 33.49 | 524.88 |
| EMSA-DMW2D | 558.69 | 38.64 | 520.05 | 39.67 | 519.02 | 31.99 | 526.70 | 29.37 | 529.32 |
| EMSA-DMW3 | 719.10 | 88.96 | 630.14 | 88.78 | 630.32 | 89.30 | 629.80 | 89.66 | 629.44 |
| EMSA-DMW4S | 756.68 | 85.56 | 671.12 | 85.37 | 671.31 | 81.75 | 674.93 | 82.01 | 674.67 |
| EMSA-DMW4D | 760.14 | 114.17 | 645.97 | 114.02 | 646.12 | 112.84 | 647.30 | 112.89 | 647.25 |
| EMSA-DMW5 | 827.81 | 70.75 | 757.06 | 71.28 | 756.53 | 71.83 | 755.98 | 71.90 | 755.91 |
| EMSA-DMW6 | 912.34 | 79.97 | 832.37 | 80.37 | 831.97 | 80.98 | 831.36 | 81.06 | 831.28 |
| EMSA-DMW7 | 704.73 | 8.37 | 696.36 | 9.10 | 695.63 | 10.63 | 694.10 | 11.15 | 693.58 |
| EMSA-DMW8 | 556.33 | 86.84 | 469.49 | 86.73 | 469.60 | 86.84 | 469.49 | 87.06 | 469.27 |
| EMSA-DMW9 | 555.76 | 42.36 | 513.40 | 43.30 | 512.46 | 45.54 | 510.22 | 45.68 | 510.08 |
| EMSA-DMW10S | 557.13 | 120.15 | 436.98 | 117.74 | 439.39 | 115.96 | 441.17 | 114.68 | 442.45 |
| EMSA-DMW10D | 556.98 | 111.73 | 445.25 | 111.05 | 445.93 | 111.07 | 445.91 | 111.27 | 445.71 |
| EMSA-P6A | 860.92 | 46.56 | 814.36 | 47.26 | 813.66 | 48.41 | 812.51 | 49.05 | 811.87 |
| EMSA-P7A | 771.50 | 36.48 | 735.02 | 36.58 | 734.92 | 37.13 | 734.37 | 37.35 | 734.15 |
| WMSA-DMW1S | 1849.61 | 124.34 | 1725.27 | 124.30 | 1725.31 | 124.56 | 1725.05 | 124.70 | 1724.91 |
| WMSA-DMW1D | 1849.79 | 123.36 | 1726.43 | 123.16 | 1726.63 | 125.33 | 1724.46 | 126.46 | 1723.33 |
| WMSA-DMW2 | 1762.79 | 281.99 | 1480.80 | 282.38 | 1480.41 | 282.16 | 1480.63 | 282.16 | 1480.63 |
| WMSA-DMW3S | 1372.09 | 20.11 | 1351.98 | 20.27 | 1351.82 | 20.49 | 1351.60 | 20.50 | 1351.59 |
| WMSA-DMW3D | 1372.21 | 20.21 | 1352.00 | 20.42 | 1351.79 | 20.59 | 1351.62 | 20.51 | 1351.70 |
| WMSA-DMW4 | 1856.76 | 109.12 | 1747.64 | 109.66 | 1747.10 | 110.55 | 1746.21 | 111.46 | 1745.30 |
| WMSA-DMW5 | 1821.13 | 298.80 | 1522.33 | 298.79 | 1522.34 | 298.66 | 1522.47 | 298.88 | 1522.25 |
| WMSA-DMW6 | 1977.82 | 333.67 | 1644.15 | 333.63 | 1644.19 | 334.65 | 1643.17 | 335.15 | 1642.67 |
| WMSA-DMW7 | 1614.98 | 52.68 | 1562.30 | 53.61 | 1561.37 | 55.42 | 1559.56 | 55.98 | 1559.00 |
| WMSA-DMW8S | 1287.93 | 10.27 | 1277.66 | 10.63 | 1277.30 | 11.79 | 1276.14 | 11.26 | 1276.67 |
| WMSA-DMW8D | 1287.92 | 11.57 | 1276.35 | 12.07 | 1275.85 | 13.15 | 1274.77 | 12.55 | 1275.37 |
| WMSA-DMW9 | 1888.18 | 94.39 | 1793.79 | 94.90 | 1793.28 | 95.68 | 1792.50 | 96.80 | 1791.38 |
| WMSA-DMW10 | 1645.02 | 110.16 | 1534.86 | 110.06 | 1534.96 | 111.41 | 1533.61 | 112.50 | 1532.52 |
| WMSA-DMW11A | 1434.96 | 37.07 | 1397.89 | 37.28 | 1397.68 | 39.87 | 1395.09 | 41.14 | 1393.82 |
| WMSA-DMW12S | 1943.10 | 156.88 | 1786.22 | 158.33 | 1784.77 | 159.68 | 1783.42 | 160.50 | 1782.60 |
| WMSA-DMW12D | 1942.26 | 162.04 | 1780.22 | 163.52 | 1778.74 | 164.78 | 1777.48 | 165.78 | 1776.48 |
| WMSA-P6A | 1920.88 | 76.34 | 1844.54 | 76.68 | 1844.20 | 78.83 | 1842.05 | 79.95 | 1840.93 |
| BKGD-2 | 512.86 | 77.99 | 434.87 | 77.80 | 435.06 | 64.17 | 448.69 | 58.04 | 454.82 |
| VWP-1 | 1814.25 | NA | Dry | NA | Dry | NA | Dry | NA | Dry |
| VWP-2 | 1614.92 | NA | 1535.05 | NA | NM | NA | 1532.51 | NA | 1531.58 |
| VWP-3 | 1468.56 | NA | 1386.50 | NA | 1386.65 | NA | 1386.80 | NA | 1386.66 |

Elevations are feet above mean sea level; EMSA-P8A was destroyed.

GW = groundwater

**Table 6: Vertical Hydraulic Gradients**
**Lehigh Permanente Site**

| Well Pair (Shallow/Deep) | Mar-16 | Jun-16 | Sep-16 | Dec-16 | Mar-17 | Jun-17 | Sep-17 | Dec-17 | Mar-18 | Jun-18 | Sep-19 | Dec-19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1S/1D | -0.18 | -0.25 | -0.18 | -0.16 | 0.1 | 0.006 | 0.21 | 0.092 | 0.027 | 0.10 | 0.023 | -0.031 |
| WMSA-DMW-3S/3D | -0.035 | 0.0008 | -0.0066 | -0.0077 | -0.25 | 0.002 | 0.002 | 0.0045 | 0.0005 | 0.002 | 0.0038 | 0.001 |
| WMSA-DMW-8S/8D | -0.0029 | -0.054 | -0.034 | -0.027 | -0.0073 | -0.009 | -0.03 | -0.015 | -0.021 | -0.031 | -0.033 | -0.027 |
| EMSA-DMW-1S/1D | 0.15 | 0.15 | 0.14 | 0.13 | 0.16 | 0.15 | 0.15 | 0.14 | 0.14 | 0.15 | 0.15 | 0.12 |
| EMSA-DMW-2S/2D | -1.22 | -1.41 | -0.54 | -0.88 | -0.50 | -0.45 | -0.41 | -0.35 | -0.35 | -0.44 | -0.30 | -0.22 |
| EMSA-DMW-4S/4D | -0.58 | -0.92 | -0.64 | -0.94 | -0.52 | -0.54 | -0.57 | -0.58 | -0.56 | -0.54 | -0.55 | -0.55 |

| Well Pair (Shallow/Deep) | Mar-19 | Jun-19 | Sep-19 | Dec-19 | 20-Mar | Jun-20 | 20-Sep | 20-Dec |
|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1S/1D | 0.385 | 0.328 | 0.180 | 0.058 | 0.039 | 0.044 | -0.020 | -0.053 |
| WMSA-DMW-3S/3D | -0.016 | 0.000 | 0.0028 | 0.0045 | 0.001 | -0.001 | 0.001 | 0.003 |
| WMSA-DMW-8S/8D | -0.008 | -0.023 | -0.060 | -0.052 | -0.057 | -0.057 | -0.057 | -0.058 |
| WMSA-DMW-12S/12D | NA | NA | -0.035 | -0.033 | -0.033 | -0.036 | -0.034 | -0.032 |
| EMSA-DMW-1S/1D | 0.14 | 0.16 | 0.15 | 0.14 | 0.15 | 0.16 | 0.16 | 0.13 |
| EMSA-DMW-2S/2D | -0.36 | -0.32 | -0.25 | -0.18 | -0.25 | -0.27 | 0.00 | 0.09 |
| EMSA-DMW-4S/4D | -0.50 | -0.50 | -0.54 | -0.55 | -0.52 | -0.52 | -0.57 | -0.56 |
| EMSA-DMW-10S/10D | NA | NA | -0.031 | 0.056 | 0.064 | 0.051 | 0.037 | 0.025 |

NA = not applicable

**Table 7: Detection Monitoring Results**
**Lehigh Permanente Site**



| Groundwater Monitoring Parameter | | EMSA-DMW-1S 09/29/2020 | | EMSA-DMW-2S 09/29/2020 | | EMSA-DMW-4S 09/30/2020 | | EMSA-DMW-8 09/30/2020 | | EMSA-DMW-9 09/29/2020 | | WMSA-DMW-3S 09/28/2020 | | WMSA-DMW-8S 09/28/2020 | | WMSA-DMW-10 09/28/2020 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dissolved Metals** | **CL** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** |
| Arsenic | 10 | 4.8 | J | <4.0 | | 6.3 | | 6.0 | | 11 | | 5.4 | | 4.3 | J | <4.0 | |
| Cadmium | 0.25 | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | |
| Copper | 9 | <4.0 | | <4.0 | | <4.0 | | 5.3 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | |
| Molybdenum | 100 | 3.4 | | 4.0 | | 69 | | 24 | | 2.6 | | 1.1 | J | 0.80 | J | 4.6 | |
| Nickel | 52 | 9.1 | | 4.0 | J | <3.0 | | <3.0 | | 5.8 | | 10 | | 6.1 | | <3.0 | |
| Selenium | 5 | 0.92 | J | 1.2 | J | 0.61 | J | <0.60 | | 0.97 | J | 4.7 | | 4.9 | | <0.60 | |
| Vanadium | 19 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Zinc | 120 | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | |

| Surface Water Monitoring Parameter | | EMSA-SW-D 09/29/2020 | | WMSA-SW-C 09/28/2020 | | WMSA-SW-D 09/28/2020 | |
|---|---|---|---|---|---|---|---|
| **Dissolved Metals** | **CL** | **Result** | **Q** | **Result** | **Q** | **Result** | **Q** |
| Arsenic | 10 | 4.6 | J | 6.8 | | 6.8 | |
| Cadmium | 0.25 | <0.12 | | <0.12 | | <0.12 | |
| Copper | 9 | <4.0 | | <4.0 | | 7.1 | |
| Molybdenum | 100 | 52 | | 3.0 | | 3.0 | |
| Nickel | 52 | 7.8 | | 9.0 | | 8.1 | |
| Selenium | 5 | 1.4 | J | 8.2 | | 7.7 | |
| Vanadium | 19 | <5.0 | | <5.0 | | <5.0 | |
| Zinc | 120 | <40 | | <40 | | <40 | |

Notes
1) Metals analyzed via EPA Method 200.8
2) All results are in micrograms per Liter (ug/L).
3) CL = concentration limit based on 2019 ESLs as specified in SMP; shading = above baseline CL
4) The CL for arsenic at monitoring well EMSA-DMW-8 is not achievable as background levels in this geologic formation are above 10 ug/L.
5) All seep locations and surface water location EMSA-DMW-A were dry during the October 2020 sampling event.
6) J = estimated value below laboratory reporting limit

| Sample Location | Date | Temp. C | pH | EC (uS) | DO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| EMSA-DMW-1S | 9/29/2020 | 22.9 | 6.65 | 1430 | 0.26 | 0.26 | 45.9 |
| EMSA-DMW-2S | 9/29/2020 | 24.3 | 6.95 | 4338 | 0.25 | 9.45 | -30.6 |
| EMSA-DMW-4S | 9/29/2020 | 22.9 | 8.34 | 627 | 0.55 | 1.83 | 1.4 |
| EMSA-DMW-8 | 9/30/2020 | 20.9 | 8.08 | 4694 | 0.21 | 0.65 | -82.1 |
| EMSA-DMW-9 | 9/29/2020 | 23.0 | 6.46 | 2940 | 0.94 | 0.55 | -56.0 |
| EMSA-SW-A | 9/29/2020 | Dry | - | - | - | - | - |
| EMSA-SW-D | 9/29/2020 | 20.0 | 7.36 | 1647 | 2.16 | 3.34 | 2.2 |
| WMSA-DMW-3S | 9/28/2020 | 19.5 | 6.82 | 1935 | 0.21 | 2.40 | 74.1 |
| WMSA-DMW-8S | 9/28/2020 | 20.2 | 6.75 | 1564 | 4.26 | 1.19 | 175 |
| WMSA-DMW-10 | 9/28/2020 | 20.5 | 7.60 | 553 | 0.35 | 1.27 | -134.5 |
| WMSA-SW-C | 9/28/2020 | 16.0 | 7.66 | 2144 | 8.41 | 1.84 | 157.4 |
| WMSA-SW-D | 9/28/2020 | 16.3 | 7.87 | 2104 | 9.47 | 1.19 | 148.5 |
| WMSA-SW-E | 9/28/2020 | Dry | - | - | - | - | - |

# Figures




0 2.5 5 10 15
Miles

## REFERENCES

Spatial Reference:
NAD 1983 StatePlane California III FIPS 0403 feet

Base Maps
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PROJECT
PERMANENTE QUARRY
SANTA CLARA COUNTY, CALIFORNIA

TITLE
**REGIONAL LOCATION MAP**

GOLDER

| | | | | |
|---|---|---|---|---|
| PROJECT No. | 063-7109-913 | | FILE No. | SiteLocMap |
| DESIGN | DLM | 1/28/2010 | SCALE: AS SHOWN | REV. 0 |
| GIS | DLM/MM | 5/6/2014 | | |
| CHECK | GW | 5/6/2014 | | |
| REVIEW | BF | 5/6/2014 | | |

**FIGURE 1**

Map: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\General\SiteLocMap.mxd | Modified: 5/6/2014 9:27:33 AM | Plotted: 8/27/2018 4:01:58 PM by mrahimi




## LEGEND

- Stream
- Property Boundary
- Area outline (Approximate)
- Former Aluminum Plant/Research Building Area (clean closed 1991, Peregren Environmental Group)

Potential Areas of Concern:

1) Former Dry Canyon Storage Area
2) Former Upper Landfill Area
3) Former Asphalt Plant Area
4) Former Brine Pond
5) Former Surface Impoundment

## NOTES

1) Locations based on conversion from local coordinates or Google Earth placement.

## REFERENCES

1)Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
2) Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
3) Potential Areas of Concern locations are based on Figure 2 from EMCON's Environmental Evaluation Report, Kaiser Aluminum & Chemical Corporation Permanente Facility, 1993.
4) February 13, 1991, "Cleanup and Facility Decommissioning Report for Kaiser Aluminum and Chemical Corporation 23333 Stevens Creek Boulevard, Cupertino, California, Peregren Environmental Group

1,200 0 1,200 Feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CALIFORNIA

TITLE

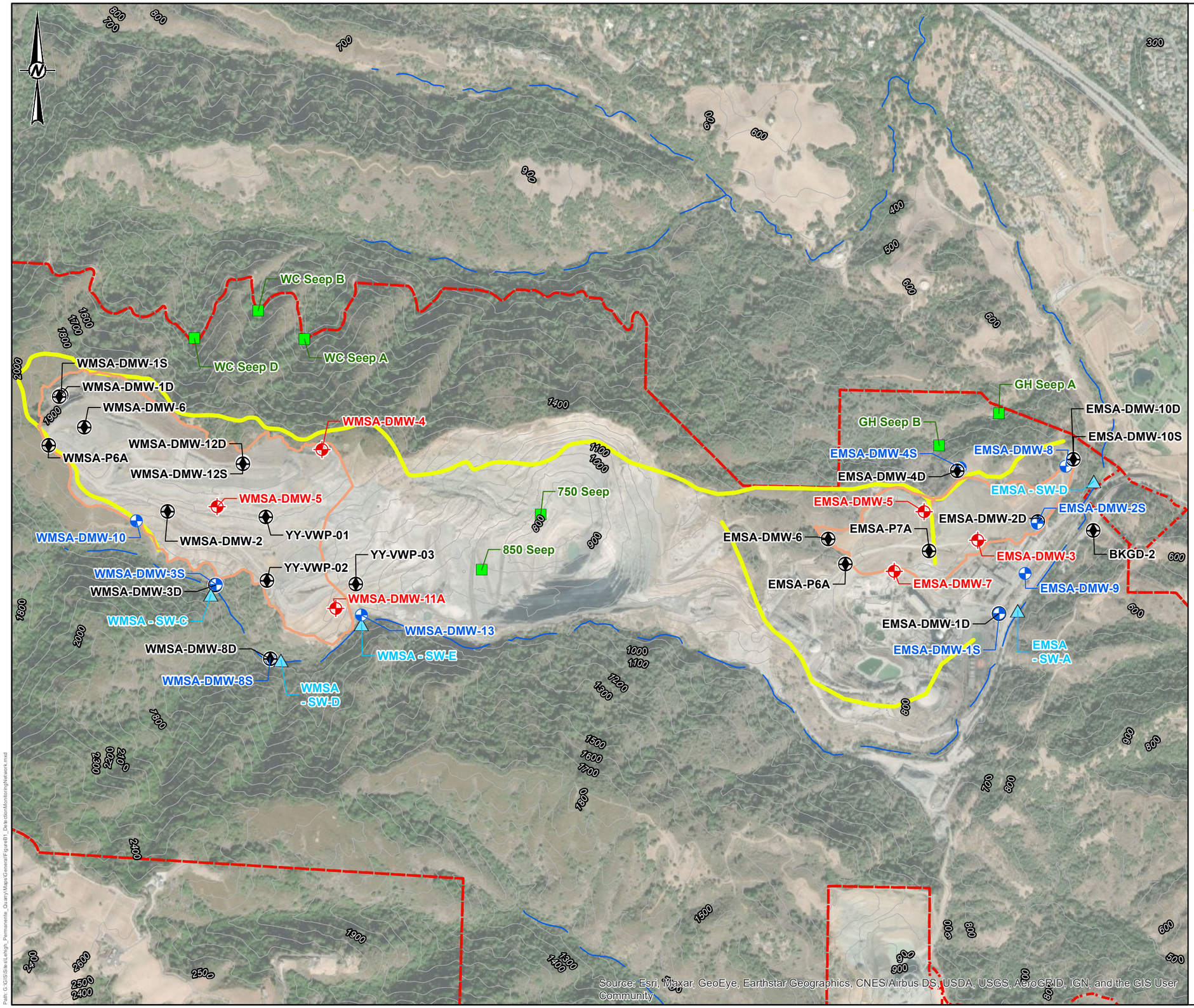
# SITE OVERVIEW

GOLDER

| | | | | |
|---|---|---|---|---|
| PROJECT No. | | 063-7109 | FILE No. | SitePlan.mxd |
| DESIGN | DZF | 10/31/2013 | SCALE: AS SHOWN | REV. 0 |
| GIS | DZF | 1/29/2020 | | |
| CHECK | GW | 1/29/2020 | | |
| REVIEW | GW | 1/29/2020 | | |

**FIGURE 2**

Map Document: G:\GIS\Sites\Lehigh_Permanente_QuarryMaps\GeneralSitePlan.mxd / Modified 1/29/2020 9:29:01 AM by MRahimi / Exported 1/29/2020 9:29:08 AM by MRahimi




LEGEND

**Detetion Monitoring Network**

- Overburden
- Point of Compliance (POC)
- Piezometers
- Seep
- Surface Water
- 100 ft surface elevation contour
- Former Ridgecrest
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 1,300 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**SITE PLAN**

CONSULTANT

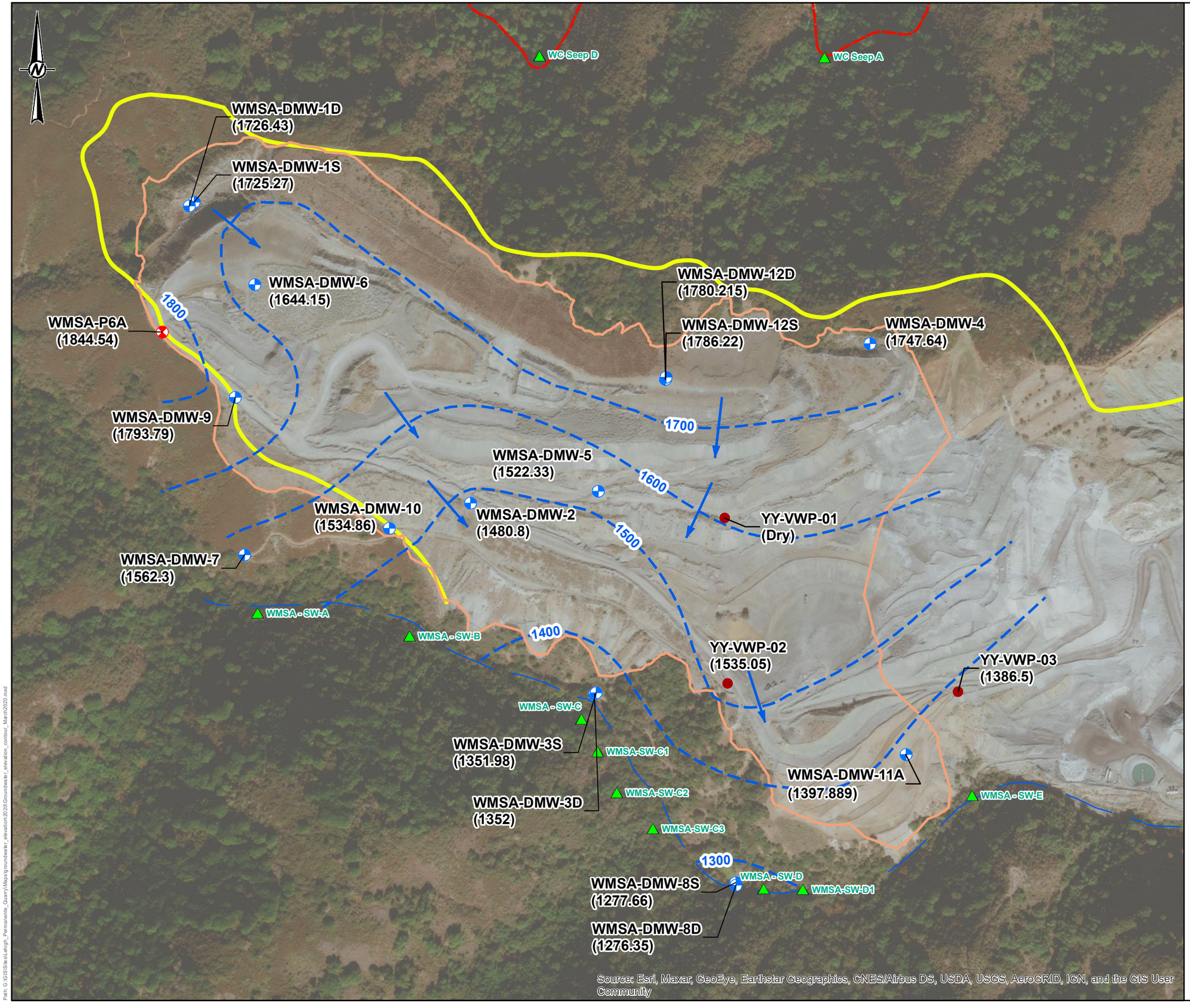
GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-08-03 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | **Figure 3** |

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\General\Figure\B1_DetectionMonitoringNetwork.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- Former Ridgecrest
- Groundwater Elevation Contours (3/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**WMSA GROUNDWATER ELEVATION CONTOUR MARCH 2020**

CONSULTANT

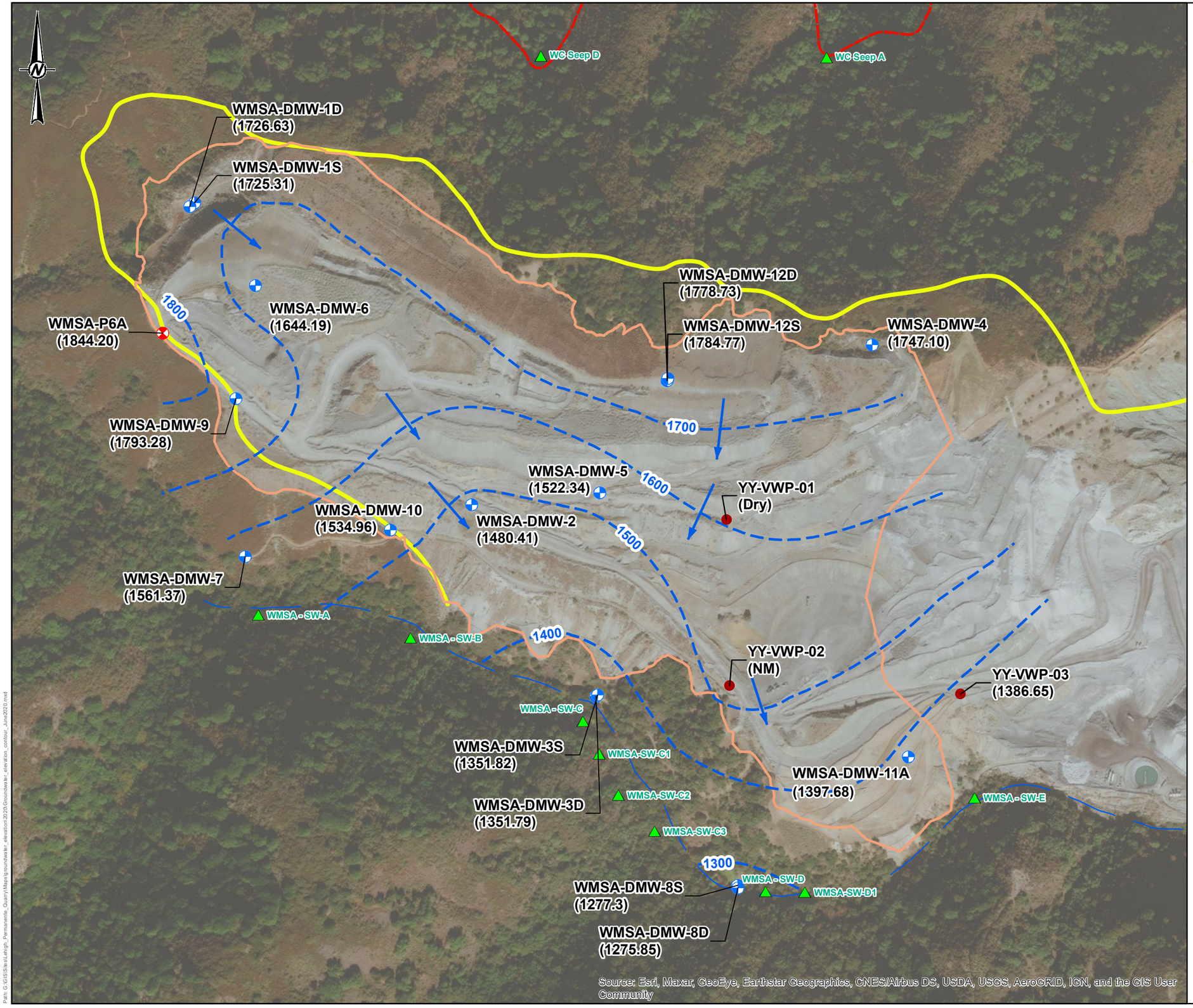
GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-30 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | GW |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 4 |

Path: G:\GIS\Site\sLehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_March2020.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B
1in
0




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- Former Ridgecrest
- Groundwater Elevation Contours (6/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**WMSA GROUNDWATER ELEVATION CONTOUR JUNE 2020**

CONSULTANT

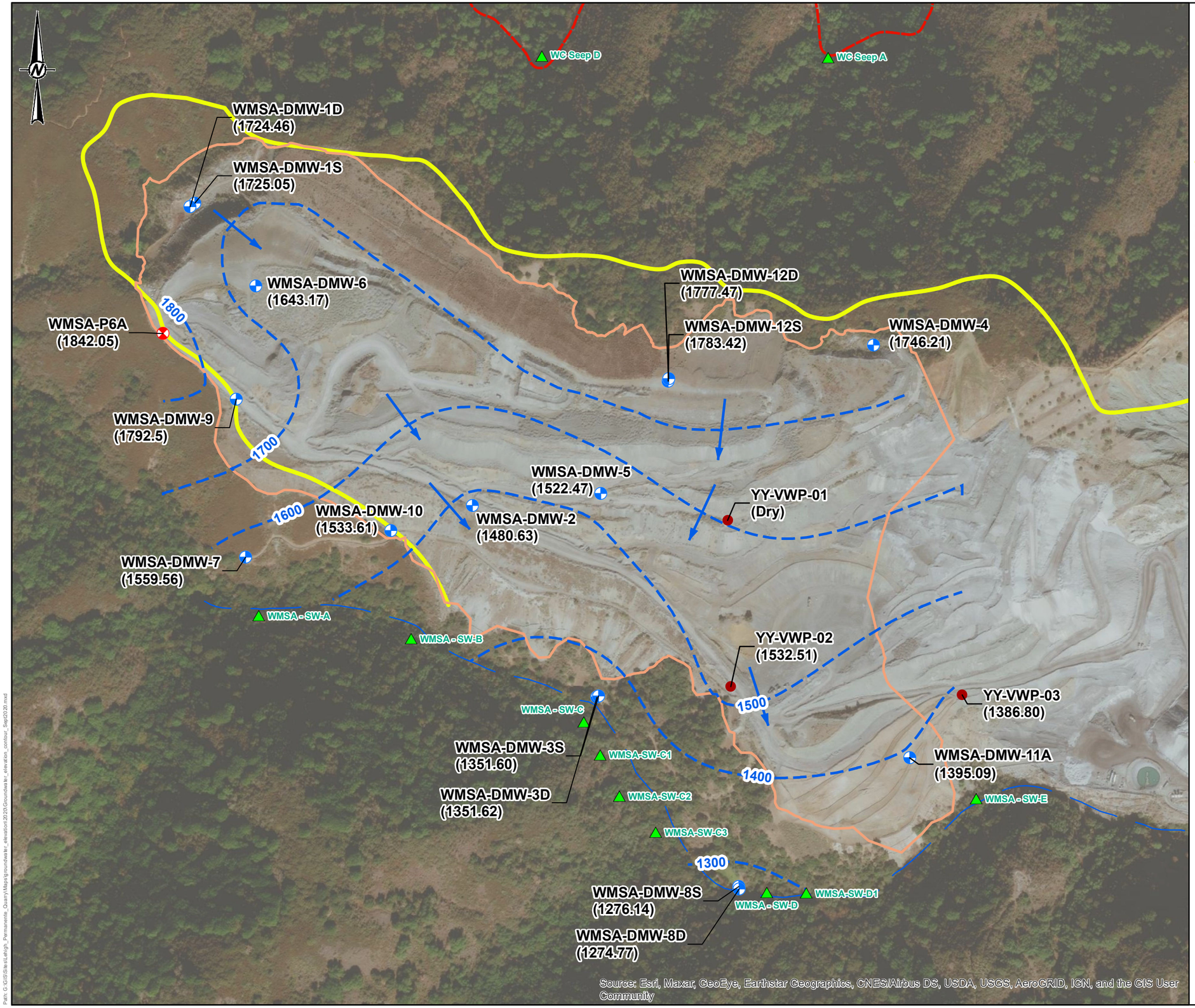
GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-30 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | GW |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 5 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_June2020.mxd




LEGEND

**Well Type**

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- Former Ridgecrest
- Groundwater Elevation Contours (9/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**WMSA GROUNDWATER ELEVATION CONTOUR SEPTEMBER 2020**

CONSULTANT

GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-30 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

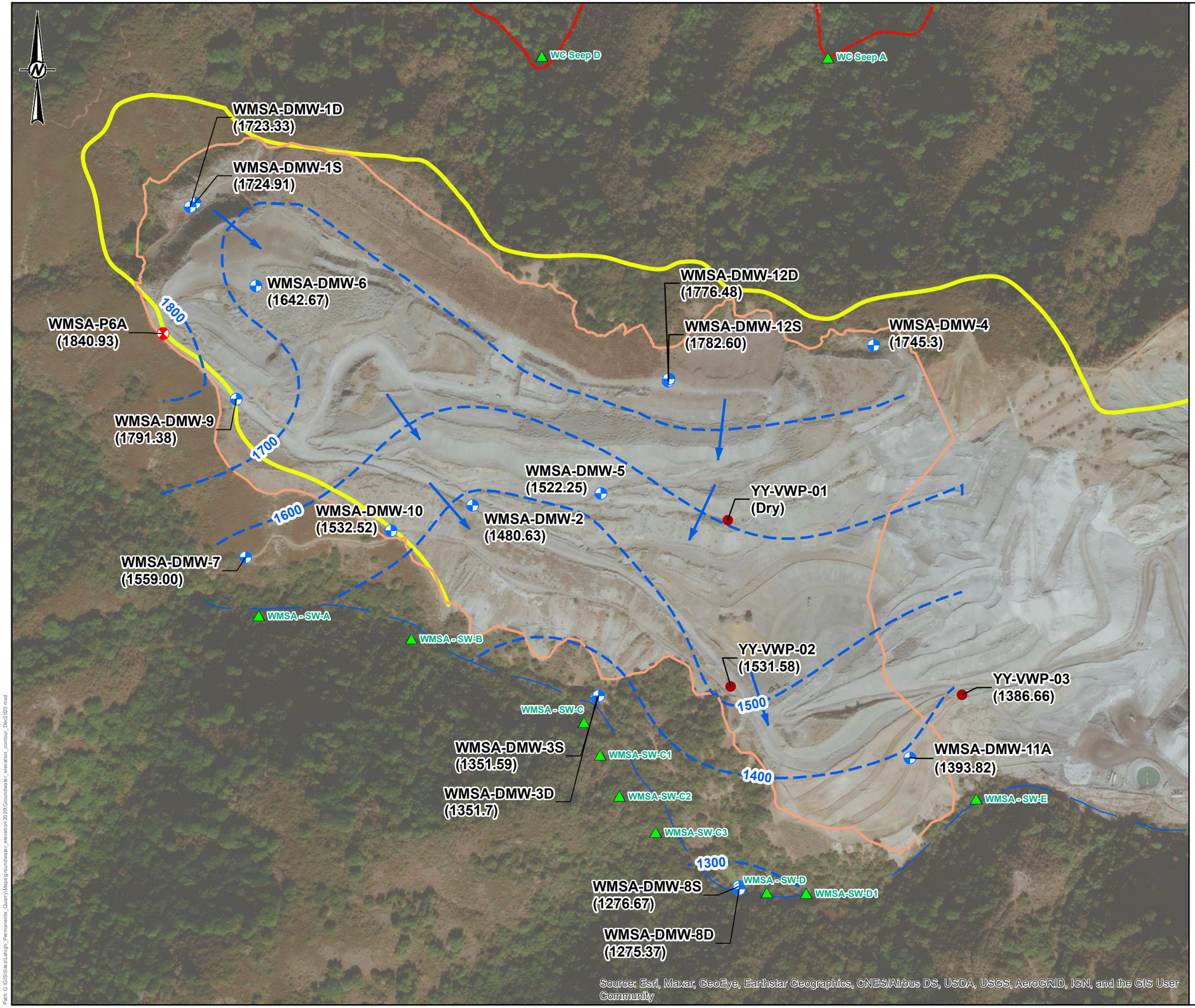
PROJECT No. 0637109960 | CONTROL --- | Rev. --- | FIGURE 6

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

1 in

0

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_Sept2020.mxd




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- Former Ridgecrest
- Groundwater Elevation Contours (12/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**WMSA GROUNDWATER ELEVATION CONTOUR DECEMBER 2020**

CONSULTANT

GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-30 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | GW |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 7 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_Dec2020.mxd




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- ~~Destroyed Piezometer~~
- Former Ridgecrest
- Groundwater Elevation Contours (3/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**EMSA GROUNDWATER ELEVATION CONTOUR MARCH 2020**

CONSULTANT

GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-28 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 8 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

1 in
0

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_March2020.mxd




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- ~~Destroyed Piezometer~~
- Former Ridgecrest
- Groundwater Elevation Contours (6/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**EMSA GROUNDWATER ELEVATION CONTOUR JUNE 2020**

CONSULTANT

GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-28 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 9 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

1 in
0

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_June2020.mxd




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- ~~Destroyed Piezometer~~
- Former Ridgecrest
- Groundwater Elevation Contours (9/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**EMSA GROUNDWATER ELEVATION CONTOUR SEPTEMBER 2020**

CONSULTANT

GOLDER

| | |
|---|---|
| YYYY-MM-DD | 2020-12-28 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 10 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

1 in
0

Path: G:\GIS\Sibelius\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_Sept2020.mxd




LEGEND

## Well Type

- Monitoring Well
- Piezometer
- VWT Piezometer
- Surface Water Sample Location
- ~~Destroyed Piezometer~~
- Former Ridgecrest
- Groundwater Elevation Contours (12/2020)
- Groundwater Flow Direction
- Property Boundary
- EMSA/WMSA Boundary (Approximate)

NOTES

- DEEP GROUNDWATER MONITORING WELLS NOT USED IN TRIANGULATION.

REFERENCE

1) USGS 1/9TH ARC NED DEM BASED OFF OF 2006 LIDAR SURVEY
2) SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3) COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA III FIPS 0403 FEET
4) FORMER RIDGECREST CREATED FROM 1952 CUPERTINO AND 1955 MINDEGO HILLS QUADRANGLE USGS TOPOGRAPHIC MAPS.

500 0 500 Feet

1 inch = 500 feet

PROJECT

PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE

**EMSA GROUNDWATER ELEVATION CONTOUR DECEMBER 2020**

CONSULTANT

GOLDER

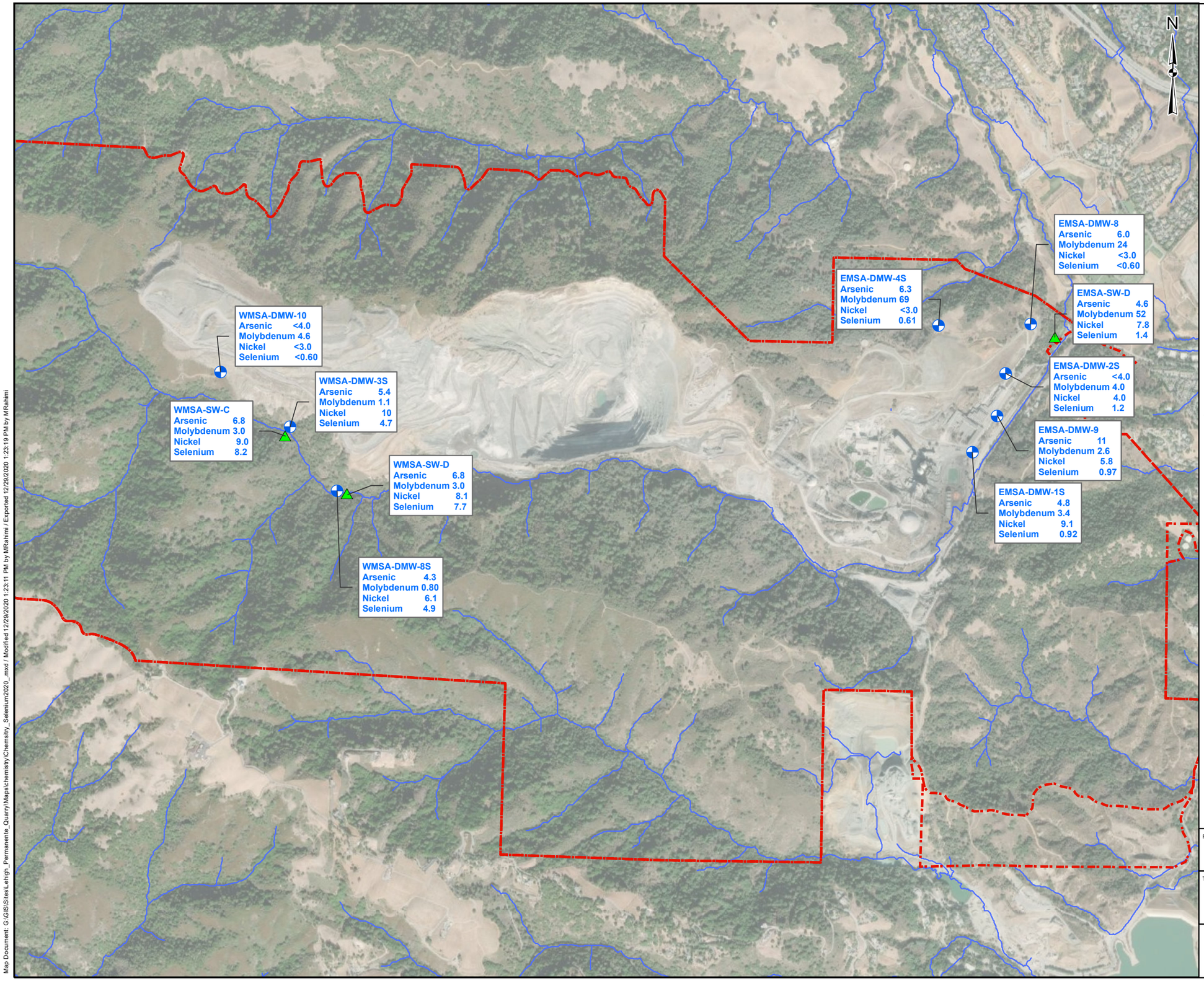
| | |
|---|---|
| YYYY-MM-DD | 2020-12-28 |
| PREPARED | TK |
| DESIGN | MR |
| REVIEW | GW |
| APPROVED | |

| PROJECT No. | CONTROL | Rev. | FIGURE |
|---|---|---|---|
| 0637109960 | --- | --- | 11 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

0 1in

Path: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\groundwater_elevation\2020\Groundwater_elevation_contour_Dec2020.mxd




## LEGEND

- Monitoring Well
- Surface Water

| | |
|---|---|
| Arsenic (Dissolved) | ug/L |
| Molybdenum (Dissolved) | ug/L |
| Nickel (Dissolved) | ug/L |
| Selenium (Dissolved) | ug/L |

- Drainage Line
- Property Boundary

## NOTES

1) WMSA-SW-E was dry during both sampling events.
2) Wells WMSA-DMW-12S, WMSADMW-12D, EMSA-DMW-10S, and EMSADMW-10D installed as part of the CSM Update are not included with the current quarterly monitoring program.
3) Seep Sampling occurs annually in May.

## REFERENCES


1) USGS 1/9th Arc NED DEM based off of 2006 LIDAR Survey
2) Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
3) Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
4) Former Ridgecrest created from 1952 Cupertino and 1955 Mindego Hills Quadrangle USGS Topographic Maps.


1,500 0 1,500 Feet

1 in = 1,457 feet

PROJECT
SEMIANNUAL REPORT
PERMANENTE QUARRY
SANTA CLARA COUNTY, CA

TITLE
**ANALYTICAL RESULTS SEPTEMEBER 2020**

GOLDER

| | | | | |
|---|---|---|---|---|
| PROJECT No. 063-7109-914 | | | FILE No. Chemistry_Selenium2020_mxd | |
| DESIGN | MM | 4/2/2013 | SCALE: 1:17,480 | REV. 0 |
| GIS | MR | 12/29/2020 | | |
| CHECK | GW | 12/29/2020 | | |
| REVIEW | GW | 12/29/2020 | | |

**FIGURE 13**


Map Document: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\chemistry\Chemistry_Selenium2020_.mxd / Modified 12/29/2020 1:23:11 PM by MRahimi / Exported 12/29/2020 1:23:19 PM by MRahimi

**APPENDIX A**

# Field Data Sheets

**WATER LEVEL DATA SHEET**

Golder Associates

Project: Lehigh Quarterly sampling ~~4Q19~~ (DW) 1Q20

Project No.: 063-7109-960

Date(s): March 2, 2020

Name: David Walter

Weather: Sunny, breezy, cool Sounder #: 33910, 253026

| Well | Date | Time | DTW (TOC) | Well Depth | Meas. By | Comments |
|---|---|---|---|---|---|---|
| WMSA-DMW-1S | 3-2-2020 | 1245 | 124.34 | | DW | |
| WMSA-DMW-1D | | 1241 | 123.36 | | | |
| WMSA-DMW-2 | | 1155 | 281.99 | | | |
| WMSA-DMW-3S | | 1050 | 20.11 | | | |
| WMSA-DMW-3D | | 1045 | 20.21 | | | |
| WMSA-DMW-4 | | 1215 | 109.12 | | | |
| WMSA-DMW-5 | | 1205 | 298.80 | | | |
| WMSA-DMW-6 | | 1311 | 333.67 | | | |
| WMSA-DMW-P6A | | 1302 | 76.34 | | | |
| WMSA-DMW-7 | | 1130 | 52.68 | | | |
| WMSA-DMW-8S | | 1105 | 10.27 | | | |
| WMSA-DMW-8D | | 1100 | 11.57 | | | |
| WMSA-DMW-9 | | 1255 | 94.39 | | | |
| WMSA-DMW-10 | | 1140 | 110.16 | | | |
| WMSA-DMW-11 | | 1015 | 37.07 | | | |
| WMSA-DMW-12S | | 1225 | 156.88 | | | |
| WMSA-DMW-12D | | 1230 | 162.04 | | | |
| EMSA-DMW-2S | | 1428 | 25.70 | | | |
| EMSA-DMW-2D | | 1430 | 38.64 | | | |
| EMSA-DMW-3 | | 1423 | 88.96 | | | |
| EMSA-DMW-4S | | 1403 | 85.56 | | | |
| EMSA-DMW-4D | | 1400 | 114.17 | | | |
| EMSA-DMW-5 | | 1350 | 70.75 | | | |
| EMSA-DMW-6 | | 1410 | 79.98 | | | |
| EMSA-DMW-P6A | | 1340 | 46.56 | | | |
| EMSA-DMW-7 | | 1520 | 8.37 | | | |
| EMSA-DMW-P7A | | 1416 | 36.48 | | | |
| EMSA-DMW-8 | | 1437 | 86.84 | | | |
| ~~EMSA-DMW-P8A~~ | | - | - | | | Destroyed |
| EMSA-DMW-9 | | 1500 | 42.36 | | | |
| EMSA-DMW-10S | | (DW) ~~1420.15~~ 1450 | 120.15 | 129.60 | | |
| EMSA-DMW-10D | | 1448 | 111.73 | | | |
| BKGD-1 | | - | - | | | Inaccessible |
| BKGD-2 | | 1530 | 77.99 | | | |
| EMSA-DMW-1S | | 1514 | 41.66 | | | |
| EMSA-DMW-1D | | 1510 | 37.73 | | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCl | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | 3-3-2020 | 1430 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | 3-3-2020 | 1330 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | 3-3-2020 | 1135 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | 3-3-2020 | 1240 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-3-2020 | - | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |

**Analysis Request**

**Sample Notes**

**TAT**

24 hr ( ) 48 hr ( ) *Lab Approval Required* 1 wk ( ) 2 wk (standard) (X)

**Lab Approval Required For Rush**

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3-3-20 | 1555 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ( )

Sampling Company Log Code: _____

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

alpha Analytical Laboratories, Inc.
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
9[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ Page 1 of 1

| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Identification** | Date | Time | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | 24 hr ○ 48 hr ○ Lab Approval Required 1 wk ○ 2 wk (standard) ○ Lab Approval Required For Rush |
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | 3-4-20 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | 3-4-20 | 1205 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | 3-4-2020 | #115 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | [signature] | 3/4/20 | 1600 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ○

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Unic[illegible] Wy., #113, Elk Grove, CA 95624
[illegible]-3190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No _____ Page ____ of ____

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Surface Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature**

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | 608 CTR Pest & PCBs | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide | Equis EDD | J Flags | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-SW-A | 3-4-20 | 1000 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-SW-B | 3-4-20 | 1100 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-C | 3-4-20 | 1325 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-D | 3-4-20 | 1135 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-E | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Duplicate | 3-4-20 | 1200 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Blank | 3-4-20 | — | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-SEEP-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-SEEP-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Trip Blank - Surface Water | | | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | | |

TAT: 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | [signature] | 3/4/20 | 1600 |
| | | | |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes ( ) No (x)

Sampling Company Log Code: _____

Global ID: EDF to (Email Address)

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories, Inc.
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
9[illegible] 5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ Page 1 of 1

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter David C Walt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-6 | 3-9-2020 | 1455 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Lab Approval Required For Rush

TAT: 24 hr ○ | 48 hr ○ Lab Approval Required | 1 wk ○ | 2 wk (standard) ✓

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/9/20 | 1610 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ○

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113 Elk Grove, CA 95624
9[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter - David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | 3-9-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | 3-9-2020 | 1110 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-9-2020 | – | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) *Lab Approval Required* 1 wk ( ) 2 wk (standard) (X)

**Lab Approval Required For Rush**

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/9/20 | 1616 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ( )

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. _____ 

**Company/Name:** Golder Associates - Sunnyvale

**Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085

**Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com

**Phone/Fax:** (408) 220-9233

**Project ID:** EMSA/WMSA Sampling

**Project No:** Ground Water

PO#

**Site Contact:** David Walter

Signature below authorizes work under terms stated on reverse side.

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

Field Sampler - Print Name & Signature: David Walter David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | 3/16/2020 | 1215 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-16-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/16/20 | 1605 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code: _____

Global ID: EDF to (Email Address)

Travel and Site Time: | Mileage: | Misc. Supplies:

Alpha Analytical Laboratories, Inc.
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Unio[illegible] Wy., #113, Elk Grove, CA 95624
[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. _____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter David C Walter

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | 3-17-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | 3-17-2020 | 1155 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | 3-17-2020 | 1400 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| ~~BKGD-1~~ DUP | 3-17-2020 | 1430 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-17-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ○ 48 hr ○ Lab Approval Required ○ 1 wk ○ 2 wk (standard) ⊗ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | | 3/17/20 | 1605 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ○

Sampling Company Log Code: _____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Unic[illegible] Wy., #113, Elk Grove, CA 95624
[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ Page_____of_____

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Surface Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter David C Nalt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | 608 CTR Pest & PCBs | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide | Equis EDD | J Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-SW-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-SW-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-SW-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-SW-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-SW-E | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-SW-A | 3-18-2020 | 1120 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-SW-B | ↓ | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-SW-C | | 1432 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-SW-D | ↓ | 1545 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| Duplicate | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| Blank | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-SEEP-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-SEEP-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| Trip Blank - Surface Water | 3-18-2020 | – | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (X)

Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Nalt | | 3/18/20 | 1610 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes ( ) No (X)

Sampling Company Log Code:

Global ID: EDF to (Email Address)

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
9[illegible]-5190 F) 916-685-5192

# Work Order
# Chain of Custody Record

Lab No _____ Page 1 of 1

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side

**Field Sampler - Print Name & Signature:** David Walter David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | 3-19-2020 | 1150 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | " | 1040 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | 3-19-2020 | 1330 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-19-2020 | - | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required 1 wk ( ) 2 wk (standard) (X) — Lab Approval Required For Rush

| Relinquished by | Received by | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/19/20 | 1551 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ( )

Sampling Company Log Code: _____

Global ID: EDF to (Email Address)

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories, Inc.
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] #113, Elk Grove, CA 95624
[illegible] 90 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. _____ Page 1 of 1

| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: David Walter David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | 3-23-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | 3-23-2020 | 1200 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-23-2020 | - | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/23/20 | 1615 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code: _____

Global ID: EDF to (Email Address)

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories, Inc.
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Central Valley Laboratory*
9090 Union Way, #113 Elk Grove, CA 95624
5190 F) 916-686-5192

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

# Work Order
# Chain of Custody Record

Lab No: _____ Page 1 of 1

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Identification** | Date | Time | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | | |
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-3 | 3-24-2020 | 1240 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-4s | ↓ | 1030 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-4d | | 1130 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-5 | | 1350 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | | |
| Blank - Ground Water | 3-24-2020 | -- | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TAT: 24 hr ○ 48 hr ○ (Lab Approval Required) 1 wk ○ 2 wk (standard) ✓ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/24/20 | 1551 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ○

Sampling Company Log Code: _____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

# Work Order
# Chain of Custody Record

Lab No._____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David C Walt |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-9 | 3-26-2020 | 1335 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | |
| Blank - Ground Water | 3-26-2020 | — | 2 | | | | | | | | | 2 | | | |

**Analysis Request**

| 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| x | x | x | x | x | x | x | x | x | x | x | x | x |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | x | x | x | x | x | x | x | x | x | | | |
| x | | | | | | | | | | | | |

**Sample Notes**

**TAT**

- 24 hr ( )
- 48 hr ( ) *Lab Approval Required*
- 1 wk ( )
- 2 wk (standard) (x)

**Lab Approval Required For Rush**

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/26/20 | 1554 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Unic[illegible] Wy., #113, Elk Grove, CA 95624
[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-2 | 3-26-20 | 1045 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |

TAT: 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | | 3/27/20 | 1556 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Unio[illegible] Wy., #113, Elk Grove, CA 95624
9[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: David Walter / David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | 3-31-2020 | 1220 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) ( )

Lab Approval Required For Rush

| | | | |
|---|---|---|---|
| Relinquished by: David C Walt | Received by: | Date 3/31/20 | Time 1608 |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |
| Relinquished by: | Received by: | Date | Time |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

alpha Analytical Laboratories Inc
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

**Company/Name:** Golder Associates - Sunnyvale

**Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085

**Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com

**Phone/Fax:** (408) 220-9233

**Project ID:** EMSA/WMSA Sampling

**Project No:** Ground Water

**PO#**

**Site Contact:** David Walter

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter / David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | 3/31/2020 | 1425 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3/31/2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes:**

**TAT:** 24 hr ( ) 48 hr ( ) *Lab Approval Required* 1 wk ( ) 2 wk (standard) (x)

**Lab Approval Required For Rush**

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/31/20 | 1608 |
| | | | |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (x) No ( )

Sampling Company Log Code: _____

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: BKGD-2
PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

| | |
|---|---|
| Well Total Depth (ft): 194.00 | Sceen Length (ft): — |
| Depth to Water (ft): 74.14 | Total Volume Purged (ml): 7200 |

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1008 | 200 | 75.74 | 15.6 | 7.32 | 2584 | 1.40 | 5.97 | -6.8 | A little cloudy |
| 1011 | | 75.94 | 16.6 | 7.60 | 2578 | 0.56 | 5.28 | -91.7 | " " " |
| 1014 | | 76.95 | 17.3 | 8.22 | 2597 | 0.14 | 4.56 | -159.7 | clear |
| 1017 | | 77.96 | 17.3 | 8.37 | 2705 | 0.06 | 12.7 | -174.1 | cloudy |
| 1020 | | 78.88 | 17.3 | 8.41 | 2708 | 0.04 | 33.5 | -176.5 | " |
| 1023 | | 79.45 | 17.3 | 8.40 | 2713 | 0.12 | 21.8 | -176.6 | " |
| 1026 | | 80.45 | 17.3 | 8.40 | 2693 | 0.12 | 18.2 | -176.4 | " |
| 1029 | | 81.40 | 17.2 | 8.40 | 2689 | 0.16 | 13.4 | -177.1 | " |
| 1032 | | 81.78 | 17.3 | 8.40 | 2690 | 0.17 | 6.52 | -176.5 | " |
| 1035 | | 82.08 | 17.1 | 8.39 | 2656 | 0.18 | 6.40 | -173.6 | " |
| 1038 | | 82.69 | 17.1 | 8.39 | 2650 | 0.19 | 6.62 | -173.3 | " |
| 1041 | | 83.12 | 17.3 | 8.39 | 2642 | 0.18 | 7.01 | -173.2 | " |
| 1045 | Sampled | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-26-2020 Time: 0930 Location: BKGD-2 Ins. # 19K102541
pH 4: (3.81 / 3.99 @ 8.8 °C) pH 7: (6.91 / 7.00 @ 9.6 °C) pH 10: (10.03 / 10.01 @ 8.2 °C)
D.O. (96.3 / 99.2 @100%) EC (1396 / 1412 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity (1.47 / 1.47 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walk **DATE:** 3-26-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-1d
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 X 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 78.00 Sceen Length (ft): —
Depth to Water (ft): 38.20 Total Volume Purged (ml): 3600

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: truck wash
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1137 | 200 | 38.80 | 18.1 | 8.29 | 726 | 0.19 | 49.3 | -30.1 | cloudy |
| 1140 | | 38.90 | 18.1 | 8.29 | 723 | 0.20 | 54.1 | -33.1 | " |
| 1143 | | 39.01 | 18.1 | 8.29 | 723 | 0.14 | 57.2 | -43.5 | " |
| 1146 | | 39.11 | 18.1 | 8.29 | 724 | 0.13 | 50.6 | -51.0 | " |
| 1149 | | 39.25 | 18.1 | 8.29 | 724 | 0.11 | 48.6 | -57.9 | " |
| 1152 | ↓ | 39.36 | 18.2 | 8.28 | 722 | 0.12 | 47.2 | -62.2 | " |
| 1155 | Sampled | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-17-2020 Time: 1045 Location: EMSA-1d Ins. # 19K10254
pH 4: ( 4.01 / 4.00 @ 12.01 °C) pH 7: ( 7.02 / 7.00 @ 11.92 °C) pH 10: ( 10.03 / 10.01 @ 11.95 °C)
D.O. ( 98.7 / 98.7 @100%) EC ( 1411 / 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity ( 1.56 / 1.56 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-17-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-15
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 X 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 52.00 Sceen Length (ft): —
Depth to Water (ft): 42.07 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: Truck wash
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1245 | 200 | 42.05 | 18.4 | 6.90 | 1441 | 0.28 | 5.63 | 3.7 | clear |
| 1248 | ↓ | 42.06 | 18.3 | 6.90 | 1435 | 0.28 | 1.79 | 18.8 | " |
| 1251 | | 42.06 | 17.5 | 6.90 | 1440 | 0.27 | 1.52 | 23.0 | " |
| 1254 | | 42.06 | 17.1 | 6.88 | 1434 | 0.24 | 1.35 | 28.2 | " |
| 1257 | ↓ | 42.06 | 17.3 | 6.88 | 1431 | 0.22 | 1.34 | 32.1 | " |
| 1300 | sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-17-2020 Time: ____ Location: EMSA-1d Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-17-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-Dmw-2d
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 120.00 Sceen Length (ft): —
Depth to Water (ft): 37.05 Total Volume Purged (ml): 3600

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1023 | 200 | 38.50 | 18.9 | 7.46 | 2068 | 1.02 | 3.31 | -34.3 | clear |
| 1026 | | 38.91 | 18.8 | 7.73 | 2076 | 0.36 | 2.27 | -76.1 | " |
| 1029 | | 39.27 | 18.8 | 7.85 | 2074 | 0.25 | 1.93 | -111.4 | " |
| 1032 | | 39.86 | 18.9 | 7.94 | 2074 | 0.23 | 1.36 | -116.5 | " |
| 1035 | | 40.20 | 19.0 | 7.96 | 2070 | 0.16 | 1.30 | -112.8 | " |
| 1038 | ↓ | 40.75 | 19.0 | 7.96 | 2070 | 0.19 | 1.20 | -108.2 | " |
| 1040 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-19-2020 Time: 0900 Location: EMSA-2d Ins. # 19K102541
pH 4: (3.96 / ____ @ 11.4 °C) pH 7: (6.95 / 7.00 @ 12.7 °C) pH 10: (9.99 / ____ @ 11.5 °C)
D.O. (96.5 / 98.4 @100%) EC (1433 / 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity (1.47 / 1.47 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-19-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-Dmw-25
PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 70.00 Sceen Length (ft): ~
Depth to Water (ft): 26.09 Total Volume Purged (ml): 7000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1134 | 200 | 27.73 | 19.6 | 7.03 | 3653 | 1.44 | 17.2 | -13.8 | cloudy |
| 1137 | ↓ | 28.27 | 19.5 | 7.06 | 3983 | 1.27 | 5.78 | -20.4 | " |
| 1140 | | 28.77 | 19.7 | 7.07 | 4006 | 1.05 | 5.67 | -21.3 | |
| 1143 | | 29.25 | 19.0 | 7.07 | 4028 | 0.98 | 5.61 | -22.6 | |
| 1146 | ↓ | 29.77 | 18.8 | 7.06 | 4030 | 1.02 | 5.57 | -22.6 | |
| 1150 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-19-2020 Time:____ Location: EMSA-2J Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-19-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA- DMW-3
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater _____ Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4___ 1___ 2 X 4___ 4.5___ 6___ 8___ Other___
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 117.00 Sceen Length (ft): —
Depth to Water (ft): 89.07 Total Volume Purged (ml): 5400

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump_____
Dedicated X Peristaltic Pump _____ Tubing Types _____ Other_____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1210 | ~~89.98~~ (est) | 89.98 | 17.6 | 6.74 | 5694 | 0.46 | 615 | 197.5 | cloudy |
| 1213 | 200 | 90.00 | 17.6 | 6.74 | 5677 | 0.43 | 655 | 196.2 | " |
| 1216 | ↓ | 89.98 | 17.6 | 6.74 | 5663 | 0.38 | 645 | 193.2 | " |
| 1219 | | 89.98 | 17.8 | 6.74 | 5656 | 0.33 | 450 | 190.1 | " |
| 1222 | | 90.00 | 18.0 | 6.74 | 5675 | 0.30 | 63.0 | 187.1 | " |
| 1225 | | 90.05 | 18.1 | 6.74 | 5674 | 0.26 | 39.6 | 184.8 | " |
| 1228 | | 90.10 | 18.1 | 6.74 | 5674 | 0.27 | 31.8 | 183.1 | " |
| 1231 | ↓ | 90.15 | 18.0 | 6.74 | 5668 | 0.24 | 31.4 | 180.0 | " |
| 1234 | | | | | | | | | |
| 1240 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-24-2020 Time:_____ Location: EMSA-4S Ins. # _____
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 3-24-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-Dmw-4d

PROJECT NO: 063-7109-9[illegible] SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4 X 4.5____ 6____ 8____ Other____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): — Sceen Length (ft): —

Depth to Water (ft): 114.00 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____

Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1113 | 200 | 114.48 | 16.8 | 6.90 | 755 | 2.18 | 5.62 | 194.5 | clear |
| 1116 | | 114.75 | 16.7 | 7.18 | 752 | 1.11 | 3.04 | 59.0 | " |
| 1119 | | 115.00 | 16.7 | 7.23 | 754 | 1.10 | 1.60 | 39.7 | " |
| 1122 | | 115.26 | 16.6 | 7.24 | 753 | 1.05 | 1.49 | 44.6 | " |
| 1125 | ↓ | 115.51 | 16.6 | 7.25 | 754 | 1.08 | 1.38 | 49.2 | " |
| 1130 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-24-2020 Time:____ Location: EmsA 45 Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-24-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-45
PROJECT NO: 063-7109-9[illegible] SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 151.00 Sceen Length (ft): ____
Depth to Water (ft): 85.10 Total Volume Purged (ml): 5400

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1002 | 200 | 87.15 | 16.3 | 7.99 | 611 | 1.60 | 1.86 | 138.1 | clear |
| 1005 | | 87.45 | 16.4 | 8.13 | 610 | 0.92 | 1.68 | 114.6 | " |
| 1008 | | 87.89 | 16.6 | 8.32 | 610 | 0.60 | 1.86 | 88.8 | " |
| 1011 | | 88.32 | 16.5 | 8.38 | 610 | 0.47 | 2.08 | 75.4 | " |
| 1014 | | 88.76 | 16.5 | 8.41 | 610 | 0.40 | 2.11 | 64.6 | " |
| 1017 | | 89.23 | 16.4 | 8.40 | 610 | 0.37 | 2.20 | 60.9 | " |
| 1020 | | 89.70 | 16.4 | 8.38 | 609 | 0.30 | 2.08 | 58.7 | " |
| 1023 | | 90.01 | 16.3 | 8.35 | 609 | 0.28 | 1.94 | 54.6 | " |
| 1026 | ↓ | 90.45 | 16.2 | 8.33 | 609 | 0.24 | 1.83 | 52.1 | " |
| 1030 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-24-2020 Time: 0800 Location: EMSA-45 Ins. # 19K10254/
pH 4: ( 4.02 / 4.00 @ 12.48 °C) pH 7: ( 7.01 / 7.00 @ 12.50 °C) pH 10: ( 10.03 / 10.01 @ 12.63 °C)
D.O. ( 96.2 / 96.2 @100%) EC ( 1415 / 1413 µmhos/cm@25°C)
ORP ( ____ / ____ / ____ @°C Turbidity ( 1.47 / 1.47 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-24-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA DMW-5
PROJECT NO: 063-7109-9[illegible] SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 177.00 Sceen Length (ft): —
Depth to Water (ft): 70.75 Total Volume Purged (ml): 4800

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1324 | 200 | 74.02 | 17.7 | 7.97 | 1440 | 2.33 | 8.05 | -140.8 | A little cloudy |
| 1327 | ↓ | 74.58 | 18.2 | 7.94 | 1437 | 2.13 | 1.64 | -117.8 | Clear |
| 1330 | | 75.13 | 18.0 | 7.93 | 1441 | 1.87 | 1.50 | -99.9 | " |
| 1333 | | 75.58 | 18.2 | 7.91 | 1434 | 1.67 | 1.46 | -87.1 | " |
| 1336 | | 76.15 | 18.1 | 7.90 | 1434 | 1.16 | 1.43 | -77.0 | " |
| 1339 | | 76.70 | 18.0 | 7.90 | 1435 | 1.10 | 1.51 | -75.9 | " |
| 1342 | | 77.15 | 18.2 | 7.89 | 1431 | 0.97 | 1.60 | -71.1 | " |
| 1345 | ↓ | 77.60 | 18.2 | 7.89 | 1427 | 0.97 | 1.48 | -67.1 | " |
| 1350 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-24-2020 Time: ____ Location: EMSA-45 Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-24-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-6
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 127.00 Sceen Length (ft): 7
Depth to Water (ft): 80.04 Total Volume Purged (ml): 3600

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1432 | 200 | 80.70 | 18.1 | 7.31 | 1078 | 2.87 | 2.05 | -84.8 | Clear |
| 1435 | ↓ | 80.77 | 17.9 | 7.20 | 1098 | 2.12 | 1.96 | -87.0 | " |
| 1438 | | 80.93 | 17.9 | 7.16 | 1112 | 1.49 | 1.50 | -101.8 | " |
| 1441 | | 80.97 | 17.9 | 7.19 | 1108 | 1.29 | 1.50 | -109.0 | " |
| 1445 | ↓ | 81.03 | 17.8 | 7.19 | 1102 | 1.12 | 1.42 | -112.2 | " |
| 1448 | | 81.06 | 17.9 | 7.20 | 1101 | 1.05 | 1.36 | -113.3 | " |
| 1455 | Sample | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X__ LaMotte Turbidity: ___X__ Other: ____

**Meter Calibration** Date: 3-9-2020 Time:____ Location: EMSA-6 Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-9-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-9mw-7
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2 X 4____ 4.5____ 6____ 8____ Other____
VOLUME PER LINEAR FOOT(ml) : (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 30.00 Sceen Length (ft): —
Depth to Water (ft): 8.63 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____
Purge Water Containment: Pond 1
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1201 | 200 | 9.60 | 19.6 | 12.14 | 6555 | 0.00 | 2.31 | -413.7 | caremel color |
| 1204 | ↓ | 9.55 | 19.7 | 12.14 | 6568 | 0.00 | 1.44 | -446.8 | " " |
| 1207 | | 9.60 | 19.8 | 12.15 | 6569 | 0.00 | 1.28 | -474.4 | " " |
| 1210 | | 9.60 | 19.8 | 12.16 | 6603 | 0.00 | 1.40 | -503.7 | " " |
| 1213 | | 9.60 | 19.8 | 12.16 | 6599 | 0.00 | 1.42 | -513.1 | " " |
| 1220 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-31-2020 Time: 1130 Location: EMSA-7 Ins. # 19K10254
pH 4: ( 4.02 / 4.00 @ 14.26 °C) pH 7: ( 7.01 / 7.00 @ 14.05 °C) pH 10: ( 9.99 / 10.00 @ 14.19 °C)
D.O. ( 96.8 / 98.2 @100%) EC ( 1420 / 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity ( 1.47 / 1.47 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-31-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-8
PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2X 4____ 4.5____ 6____ 8____ Other____
VOLUME PER LINEAR FOOT(ml) : (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 199.00 Sceen Length (ft): —
Depth to Water (ft): 86.74 Total Volume Purged (ml): 7800

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1251 | 200 | 87.31 | 18.8 | 6.94 | 4417 | 5.95 | 2.91 | 132.7 | clear |
| 1254 | | 87.98 | 18.2 | 6.92 | 4411 | 5.17 | 3.17 | 124.6 | " |
| 1257 | | 88.14 | 18.2 | 6.99 | 4380 | 3.84 | 2.00 | 87.2 | " |
| 1300 | | 88.28 | 18.3 | 7.11 | 4364 | 3.23 | 1.98 | 53.9 | " |
| 1303 | | 88.36 | 18.5 | 7.26 | 4392 | 2.80 | 2.01 | 39.1 | " |
| 1306 | | 88.49 | 18.8 | 7.42 | 4412 | 2.48 | 1.96 | 29.8 | " |
| 1309 | | 88.60 | 19.0 | 7.73 | 4422 | 2.45 | 1.93 | 17.1 | " |
| 1312 | | 88.82 | 19.2 | 8.00 | 4427 | 2.36 | 1.96 | 3.2 | " |
| 1315 | | 88.94 | 19.3 | 8.12 | 4417 | 2.16 | 1.70 | -2.9 | " |
| 1318 | | 89.08 | 19.4 | 8.22 | 4400 | 2.28 | 1.72 | -9.7 | " |
| 1321 | | 89.18 | 19.6 | 8.23 | 4421 | 2.36 | 1.84 | -15.3 | " |
| 1324 | | 89.31 | 20.0 | 8.26 | 4435 | 2.36 | 1.92 | -20.5 | " |
| 1327 | ↓ | 89.43 | 20.1 | 8.25 | 4437 | 2.25 | 1.95 | -21.8 | " |
| 1330 | Sampled | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-19-2020 Time:____ Location: EMSA-2d Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-19-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-9
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 X 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 60.00 Sceen Length (ft): ____
Depth to Water (ft): 42.23 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: Truck wash
Field QC Samples Collected: EB-___ FB-___ DUP-X Time: 1430 Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1345 | 200 | 42.28 | 18.7 | 6.61 | 2773 | 7.25 | 2.62 | -26.0 | clear |
| 1348 | " | 42.30 | 18.6 | 6.60 | 2832 | 6.95 | 2.06 | -27.1 | " |
| 1351 | " | 42.30 | 18.7 | 6.60 | 2845 | 6.63 | 1.85 | -29.2 | " |
| 1354 | " | 42.30 | 18.7 | 6.60 | 2871 | 6.31 | 1.77 | -31.3 | " |
| 1357 | " | 42.30 | 18.7 | 6.60 | 2879 | 6.16 | 1.86 | -32.4 | " |
| 1400 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-17-2020 Time: ____ Location: EMSA-1d Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-17-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-SW-A
PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X (DW) Surface Water X Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____
Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____
Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**
Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: _____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: _____ Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**
Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ~~Chlorine~~ ORP (mv) (~~mg/l~~) (DW) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (~~%~~) (DW) | |
|---|---|---|---|---|---|---|---|---|
| 1200 | 14.5 | med | 7.98 | 229.6 | 792 | 3.56 | ~~229.6~~ 6.91 | obs clear |

Sheen: No Odor: No Sample Date: 3-18-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-18-2020 Time: 1130 Location: EMSA-SW-A Ins. # 19K102541
pH 4: ( 4.04 / 4.00 @ 13.42 °C) pH 7: ( 7.00 / 7.00 @ 13.79 °C) pH 10: ( 10.03 / 10.01 @ 13.85 °C)
D.O. ( 97.3 / 97.9 @100%) EC ( 1413 / 1413 µmhos/cm@25°C)
ORP ( _____ / _____ / _____ @°C Turbidity ( 1.54 / 1.54 NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-18-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-SW-B

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater ~~X~~ Surface Water X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ~~Chlorine (mg/l)~~ ORP (mv) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) ~~(%)~~ | |
|---|---|---|---|---|---|---|---|---|
| 1300 | 13.8 | med | 7.99 | 241.6 | 944 | 1.93 | 6.67 | obs clear |

Sheen: No Odor: No Sample Date: 3-18-2020

Field Measurement Devices: Horiba: _____ YSI: ____X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-18-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: EMSA-SW-C

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater ___ X (SW) Surface Water X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4___ 4.5___ 6___ 8___ Other___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ~~Chlorine~~ ORP (mv) ~~(mg/l)~~ | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) ~~(%)~~ |
|---|---|---|---|---|---|---|---|
| 1430 | 13.7 | med | 8.14 | 90.9 | 1037 | 1.37 | 9.57 |

Sheen: No Odor: No Sample Date: 3-18-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-18-2020 Time:_____ Location: EMSA-SW-A Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-18-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-SW-D
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X (DW) Surface Water X Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____
Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____
Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**
Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____
Purge Water Containment: _____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**
Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ORP (mv) Chlorine ~~(mg/l)~~ (DW) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| 1545 | 13.4 | med | 8.13 | 149.2 | 1064 | 1.10 | 9.00 |

obs clear

Sheen: No Odor: No Sample Date: 3-18-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-18-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-DMW-1d

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 167.00 Sceen Length (ft): —

Depth to Water (ft): 123.82 Total Volume Purged (ml): 4200

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1137 | 200 | 124.22 | 13.9 | 7.17 | 1055 | 3.17 | 1.11 | 31.7 | clear |
| 1140 | ↓ | 124.17 | 13.7 | 7.11 | 1064 | 1.78 | 1.07 | 10.2 | " |
| 1143 | | 124.20 | 13.9 | 7.11 | 1066 | 1.15 | 1.10 | -5.6 | " |
| 1146 | | 124.20 | 13.9 | 7.12 | 1070 | 0.91 | 1.19 | -9.5 | " |
| 1149 | | 124.20 | 14.0 | 7.16 | 1073 | 0.79 | 1.12 | -7.6 | " |
| 1152 | | 124.20 | 13.9 | 7.16 | 1072 | 0.69 | 1.07 | -4.7 | " |
| 1155 | ↓ | 124.20 | 13.9 | 7.15 | 1072 | 0.73 | 1.00 | -3.8 | " |
| 1200 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-23-2020 Time: 1030 Location: WMSA-1d Ins. # 19/C102541

pH 4: (4.04 / 4.00 @12.74 °C) pH 7: (7.03 / 7.00 @12.63 °C) pH 10: (9.97 / 9.99 @12.57 °C)

D.O. (93.1 / 94.5 @100%) EC (1412 / 1413 µmhos/cm@25°C)

ORP (_____ / _____ / _____ @°C Turbidity (1.47 / 1.47 NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 3-23-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-Dmw-15
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2 X 4____ 4.5____ 6____ 8____ Other____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 137.00 Sceen Length (ft): -
Depth to Water (ft): 124.41 Total Volume Purged (ml): 4200

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1238 | 200 | 125.49 | 14.9 | 7.16 | 994 | 5.86 | 1.36 | 169.8 | clear |
| 1241 | ↓ | 125.87 | 14.9 | 6.97 | 994 | 2.55 | 1.55 | 169.2 | " |
| 1244 | | 126.08 | 14.8 | 6.89 | 1012 | 1.19 | 1.17 | 149.4 | " |
| 1247 | | 126.20 | 14.8 | 6.88 | 1017 | 0.74 | 1.09 | 132.6 | " |
| 1250 | | 126.43 | 15.0 | 6.84 | 1006 | 0.49 | 1.01 | 119.4 | " |
| 1253 | | 126.64 | 15.0 | 6.84 | 1005 | 0.44 | 0.93 | 117.9 | " |
| 1256 | | 126.83 | 14.9 | 6.83 | 1003 | 0.45 | 0.80 | 116.1 | " |
| 1300 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-23-2020 Time:____ Location: WMSA-1d Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-23-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-8

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): ____ Sceen Length (ft): ____

Depth to Water (ft): 282.46 Total Volume Purged (ml): 8400

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____

Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1218 | 200 | 283.29 | 18.5 | 8.29 | 1067 | 6.43 | 16.5 | 212.5 | cloudy |
| 1221 | | 283.68 | 18.5 | 8.25 | 1078 | 6.61 | 17.7 | 213.4 | " |
| 1224 | | 283.75 | 18.6 | 8.22 | 1083 | 6.43 | 15.2 | 214.2 | " |
| 1227 | | 283.85 | 18.5 | 8.18 | 1099 | 6.11 | 11.6 | 215.9 | " |
| 1230 | | 284.03 | 18.1 | 8.06 | 1123 | 5.17 | 10.4 | 219.0 | " |
| 1233 | | 284.22 | 17.9 | 7.59 | 1214 | 4.53 | 9.26 | 227.6 | " |
| 1236 | | 284.38 | 18.0 | 7.16 | 1285 | 3.54 | 14.3 | 230.0 | " |
| 1239 | | 284.45 | 18.0 | 6.90 | 1540 | 2.49 | 48.2 | 223.1 | Brown |
| 1242 | | 284.52 | 17.9 | 6.85 | 1940 | 1.93 | 483 | 201.8 | " |
| 1245 | | 284.55 | 18.0 | 6.85 | 2178 | 1.58 | 692 | 187.8 | " |
| 1248 | | 284.61 | 18.4 | 6.89 | 2398 | 1.30 | 769 | 179.5 | " |
| 1251 | | 284.65 | 18.4 | 6.89 | 2443 | 1.14 | 672 | 177.8 | " |
| 1254 | | 284.66 | 18.7 | 6.87 | 2434 | 0.96 | 642 | 177.3 | " |
| 1257 | | 284.70 | 18.8 | 6.87 | 2428 | 1.08 | 601 | 176.1 | " |

1300 Sampled

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-9-2020 Time:____ Location: WMSA-6 Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-9-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-3d

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 X 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 65.00 Sceen Length (ft): ____

Depth to Water (ft): 20.22 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____

Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1318 | 200 | 21.50 | 15.6 | 9.55 | 411 | 0.27 | 5.43 | 12.8 | clear |
| 1321 | ↓ | 21.53 | 15.8 | 9.56 | 410 | 0.28 | 5.46 | -14.3 | " |
| 1324 | | 21.65 | 16.0 | 9.59 | 412 | 0.27 | 5.49 | -26.4 | " |
| 1327 | | 21.72 | 16.1 | 9.55 | 412 | 0.26 | 5.71 | -27.4 | " |
| 1330 | ↓ | 21.85 | 16.2 | 9.52 | 410 | 0.24 | 5.42 | -25.4 | " |
| Sampled 1335 | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X__ LaMotte Turbidity: ___X__ Other: ____

**Meter Calibration** Date: 3-3-2020 Time: ____ Location: WMSA-7 Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-3-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-35

PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 X 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 30.00 Sceen Length (ft): ~

Depth to Water (ft): 20.12 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____

Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____

Purge Water Containment: None.

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1410 | 200 | 20.55 | 14.8 | 6.85 | 1875 | 0.39 | 2.27 | 149.2 | clear |
| 1413 | " | 20.55 | 14.8 | 6.85 | 1874 | 0.09 | 2.22 | 150.5 | " |
| 1416 | " | 20.55 | 14.7 | 6.84 | 1875 | 0.08 | 2.20 | 151.7 | " |
| 1419 | " | 20.55 | 14.8 | 6.84 | 1874 | 0.15 | 2.35 | 152.7 | " |
| 1422 | " | 20.55 | 14.9 | 6.85 | 1876 | 0.21 | 2.48 | 154.2 | " |
| 1430 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X__ LaMotte Turbidity: ___X__ Other: ____

**Meter Calibration** Date: 3-3-2020 Time:____ Location: WMSA-7 Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-3-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-Dmw.4
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2 X 4____ 4.5____ 6____ 8____ Other____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 117.00 Sceen Length (ft): —
Depth to Water (ft): 109.43 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1408 | 200 | 109.60 | 17.0 | 7.11 | 1885 | 2.98 | 4.10 | 104.2 | clear |
| 1411 | ↓ | 109.55 | 17.4 | 7.13 | 1882 | 2.80 | 2.13 | 110.3 | " |
| 1414 | | 109.55 | 18.1 | 7.14 | 1875 | 2.98 | 2.07 | 116.4 | " |
| 1417 | | 109.53 | 17.7 | 7.15 | 1887 | 2.74 | 1.88 | 119.0 | " |
| 1420 | ↓ | 109.55 | 17.4 | 7.17 | 1880 | 2.60 | 1.90 | 118.6 | " |
| 1425 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-31-2020 Time:____ Location: EMSA-7 Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** Had to walk to well due to mud blocking road.

**SIGNATURE:** David C Walt **DATE:** 3-31-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-DMW-5

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW _____

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 X 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): _____ Sceen Length (ft): —

Depth to Water (ft): 298.79 Total Volume Purged (ml): 5400

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1147 | 200 | 299.10 | 15.9 | 7.67 | 913 | 1.45 | 1.60 | -41.1 | clear |
| 1150 | | 299.10 | 15.6 | 7.64 | 917 | 2.02 | 1.30 | -76.0 | " |
| 1153 | | 299.10 | 15.9 | 7.59 | 915 | 1.59 | 1.32 | -74.1 | " |
| 1156 | | 299.12 | 15.6 | 7.51 | 921 | 1.12 | 1.44 | -71.5 | " |
| 1159 | | 299.12 | 16.0 | 7.43 | 911 | 1.04 | 1.27 | -66.5 | " |
| 1202 | | 299.15 | 15.9 | 7.34 | 888 | 1.00 | 1.20 | -54.7 | " |
| 1205 | | 299.15 | 15.8 | 7.30 | 873 | 1.09 | 1.26 | -49.9 | " |
| 1208 | | 299.15 | 16.1 | 7.28 | 862 | 1.22 | 1.31 | -43.0 | " |
| 1211 | | 299.18 | 16.2 | 7.27 | 852 | 1.15 | 1.30 | -41.6 | " |
| 1215 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-16-2020 Time: 1115 Location: WMSA-5 Ins. # 19K102541

pH 4: (4.05 / 4.06 @ 11.0 °C) pH 7: (7.03 / 7.00 @ 11.2 °C) pH 10: (10.08 / 10.03 @ 11.2 °C)

D.O. (96.9 / 96.9 @100%) EC (1424 / 1413 µmhos/cm@25°C)

ORP (_____ / _____ / _____ @°C Turbidity (_____ / _____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-16-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-6
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): ____ Sceen Length (ft): 10
Depth to Water (ft): 337.74 Total Volume Purged (ml): 4200

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1047 | 200 | 334.03 | 16.7 | PK 7.50 | 1730 | 6.22 | 1.72 | 207.4 | Clear |
| 1050 | | 334.04 | 16.3 | 7.43 | 1770 | 6.53 | 1.91 | 211.2 | " |
| 1053 | | 334.04 | 16.0 | 7.39 | 1798 | 6.09 | 1.92 | 214.7 | " |
| 1056 | | 334.04 | 16.7 | 7.24 | 1828 | 5.52 | 2.02 | 220.3 | " |
| 1059 | | 334.04 | 16.8 | 7.19 | 1909 | 5.01 | 2.14 | 219.8 | " |
| 1102 | | 334.04 | 16.6 | 7.13 | 1936 | 4.61 | 2.25 | 220.3 | " |
| 1105 | | 334.04 | 16.9 | 7.08 | 1951 | 4.36 | 2.40 | 221.2 | " |
| 1110 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X__ LaMotte Turbidity: ___X__ Other: ____

**Meter Calibration** Date: 3-9-2020 Time: 0930 Location: WMSA-6 Ins. # 19K10254
pH 4: (4.00 / 4.00 @14.47 °C) pH 7: (7.02 / 7.00 @14.96 °C) pH 10: (10.03 / 10.00 @14.43 °C)
D.O. (98.6 / 98.6 @100%) EC (1411 / 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity (1.03 / 1.03 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-9-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: wmsA-omw-7
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 95.00 Sceen Length (ft): ~
Depth to Water (ft): 52.71 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1116 | 200 @ 54.47 | 54.47 | 17.2 | 7.86 | 516 | 3.62 | 1.33 | -145.2 | clear / odor |
| 1119 | " | 54.86 | 17.1 | 7.86 | 516 | 3.41 | 3.50 | -143.1 | " " |
| 1122 | " | 55.23 | 17.2 | 7.85 | 516 | 3.31 | 1.15 | -141.9 | " " |
| 1125 | " | 55.60 | 17.3 | 7.85 | 515 | 3.19 | 1.21 | -142.4 | " " |
| 1128 | ↓ | 55.94 | 17.3 | 7.85 | 515 | 3.17 | 1.40 | -143.7 | " " |
| 1135 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 3-3-2020 Time: 1030 Location: wmsA-7 Ins. # 19K10254
pH 4: (4.03 / 4.00 @ 16.6 °C) pH 7: (7.00 / 7.00 @ 17.2 °C) pH 10: (10.02 / 10.00 @ 17.5 °C)
D.O. (92.8 / 95.0 @100%) EC (1405 / 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity ( 1.04 / 1.04 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walt **DATE:** 3-3-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-Dmw-8d

PROJECT NO: 063-7109-90 _____ SAMPLED BY: DW _____

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 60.00 Sceen Length (ft): ~~Total~~ (DV) —

Depth to Water (ft): 11.55 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump _____ Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1146 | 200 | 13.28 | 13.8 | 9.43 | 467 | 0.37 | 1.40 | 104.7 | clear |
| 1149 | ↓ | 14.13 | 14.0 | 9.38 | 433 | 0.31 | 1.43 | 100.6 | " |
| 1152 | | 14.95 | 14.0 | 9.38 | 424 | 0.31 | 1.47 | 102.9 | " |
| 1155 | | 15.74 | 13.9 | 9.37 | 417 | 0.28 | 1.48 | 108.7 | " |
| 1158 | ↓ | 16.25 | 13.9 | 9.36 | 416 | 0.32 | 1.40 | 115.2 | |
| 1205 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-4-2020 Time:_____ Location: WMSA-SW-A Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-4-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-8S
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 30.00 Sceen Length (ft): —
Depth to Water (ft): 10.24 Total Volume Purged (ml): 3000

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1239 | 200 | 10.40 | 13.0 | 6.99 | 1120 | 4.75 | 1.19 | 167.5 | clear |
| 1242 | ↓ | 10.50 | 13.0 | 6.99 | 1120 | 4.81 | 1.39 | 172.5 | " |
| 1245 | | 10.40 | 13.0 | 6.98 | 1119 | 4.67 | 1.07 | 176.2 | |
| 1248 | | 10.40 | 12.9 | 6.99 | 1120 | 4.71 | 1.22 | 179.4 | |
| 1252 | | 10.40 | 12.8 | 6.98 | 1119 | 4.61 | 1.14 | 180.9 | |
| 1300 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X__ LaMotte Turbidity: ___X__ Other: ____

**Meter Calibration** Date: 3-4-2020 Time:____ Location: WMSA-SVA Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-4-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-Dmw-9
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4___ 1___ 2 X 4___ 4.5___ 6___ 8___ Other___
VOLUME PER LINEAR FOOT(ml) : (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 117.00 Sceen Length (ft): —
Depth to Water (ft): 94.50 Total Volume Purged (ml): 5400

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump___
Dedicated X Peristaltic Pump ___ Tubing Types ___ Other___
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:___Other ___

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1307 | 200 | 95.04 | 16.7 | 6.84 | 1833 | 0.70 | 73.7 | 154.9 | cloudy |
| 1310 | | 95.22 | 16.5 | 6.84 | 1834 | 0.35 | 10.2 | 152.9 | " |
| 1313 | | 95.20 | 16.4 | 6.86 | 1833 | 0.27 | 39.3 | 150.0 | " |
| 1316 | | 95.29 | 16.5 | 6.88 | 1833 | 0.24 | 24.6 | 146.8 | " |
| 1319 | | 95.35 | 16.3 | 6.89 | 1832 | 0.21 | 19.0 | 144.1 | " |
| 1322 | | 95.38 | 16.4 | 6.89 | 1832 | 0.19 | 13.3 | 142.8 | " |
| 1325 | | 95.35 | 16.4 | 6.90 | 1833 | 0.20 | 17.8 | 141.8 | " |
| 1328 | | 95.34 | 16.3 | 6.90 | 1831 | 0.17 | 12.0 | 141.3 | |
| 1331 | ↓ | | | | | | | | |
| 1335 | sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ___ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ___

**Meter Calibration** Date: 3-26-2020 Time:___ Location: BKGD-2 Ins. # ___
pH 4: (___/___@___°C) pH 7: (___/___@___°C) pH 10: (___/___@___°C)
D.O. (___/___@100%) EC (___/___µmhos/cm@25°C)
ORP (___/___/___@°C Turbidity (___/___NTU)

**REMARKS:** ___

**SIGNATURE:** David C Walt **DATE:** 3-26-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-DMW-10

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW _____

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 145.00 Sceen Length (ft): ~~30.00~~ (N/A)

Depth to Water (ft): 110.17 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1220 | 200 | 112.57 | 17.2 | 7.71 | 549 | 3.58 | 1.32 | -105.5 | clear |
| 1223 | ↓ | 113.25 | 17.2 | 7.76 | 552 | 2.46 | 1.33 | -127.3 | " |
| 1226 | | 113.91 | 17.1 | 7.79 | 551 | 2.07 | 0.97 | -136.0 | " |
| 1229 | | 114.51 | 17.0 | 7.80 | 550 | 1.79 | 1.26 | -140.3 | " |
| 1232 | ↓ | 115.17 | 17.1 | 7.80 | 550 | 1.67 | 1.37 | -141.9 | |
| 1240 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 3-3-2020 Time:_____ Location: WMSA-7 Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-3-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-11

PROJECT NO: 063-7109-9560 SAMPLED BY: DW/JP

SAMPLE TYPE: Groundwater ____ Surface Water ____X__ Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

| | |
|---|---|
| Well Total Depth (ft): | Volume in Casing (gal): |
| Depth to Water (ft): 37.10 | Calculated Purge (volumes / gal.): |
| Height of Water Column (ft): | Actual Pre-Sampling Purge (gal): |

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump X Electric Submersible Pump____ Dedicated ____ Other____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| Time (2400 Hr) | Volume (gallons) DTW | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | DO | ORP Observation |
|---|---|---|---|---|---|---|---|---|---|
| 1358 | 37.10 | 18.6 | 1853 | 7.08 | clear | 4.79 | — | 7.43 | 178.3 |
| 1401 | 37.10 | 19.1 | 1848 | 7.26 | " | 3.68 | — | 7.28 | 182.2 |
| 1404 | 37.10 | 19.0 | 1851 | 7.25 | " | 2.48 | — | 7.10 | 185.8 |
| 1407 | 37.10 | 19.0 | 1852 | 7.25 | " | 1.93 | — | 6.96 | 189.8 |
| 1410 | 37.10 | 19.0 | 1852 | 7.25 | " | 1.58 | — | 6.88 | 192.7 |
| 1413 ~~1415~~ | 37.10 | 19.0 | 1853 | 7.25 | " | 1.32 | — | 6.81 | 192.4 |
| | | | | | | | | | |

Purge Date: ____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer____Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____Electric Submersible Pump____ Dedicated____ Other____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | Chlorine (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| 1415 | — | — | — | — | — | — | — |

Sheen: No Odor: No Sample Date: 3-4-2020

Field Measurement Devices: Horiba: ____ YSI: ____X___ LaMotte Turbidity: ____X__ Other: ____

**Meter Calibration** Date:____ Time:____ Location:____ Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-SW-A

PROJECT NO: 063-7109-960 SAMPLED BY: DW / JP

SAMPLE TYPE: Groundwater ____ Surface Water ___X___ Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4___ 4.5___ 6___ 8___ Other___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ____ Volume in Casing (gal): ____

Depth to Water (ft): ____ Calculated Purge (volumes / gal.): ____

Height of Water Column (ft): ____ Actual Pre-Sampling Purge (gal): ____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump____ ____ Dedicated ____ Other____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: ____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump____ Dedicated____ Other ____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1000 | 11.0 | 549 | 8.11 | 10.15 | clear | 0.98 | 134.1 |

Sheen: No Odor: No Sample Date: 3-4-2020

Field Measurement Devices: Horiba: ____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: ____

**Meter Calibration** Date: 3-4-2020 Time: 0900 Location: WMSA-SW-A Ins. # ____

pH 4: (4.00 / 4.00 @ 14.01 °C) pH 7: (7.01 / 7.00 @ 14.32 °C) pH 10: (10.06 / 10.01 @ 14.54 °C)

D.O. (98.9 / 98.9 @100%) EC (1411 / 1413 µmhos/cm@25°C)

ORP (____ / ____ / ____ @°C Turbidity (1.04 / 1.04 NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-SW-B

PROJECT NO: 063-7109-9600 SAMPLED BY: DW/JP

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4___ 4.5___ 6___ 8___ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1106 | 10.8 | 542 | 8.32 | 8.16 | clear | 1.30 | 101.9 |

Sheen: No Odor: No Sample Date: 3-4-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date: 3-4-2020 Time:_____ Location: WMSA-SW-A Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-SW-E

PROJECT NO: 063-7109-962 _____ SAMPLED BY: DW/JP

SAMPLE TYPE: Groundwater _____ Surface Water ___X__ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ~~Chlorine~~ (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|
| 1325 | 12.3 | — | 7.98 | — | 1335 | 4.51 | 9.09 | 174.7 |

Sheen: No Odor: No Sample Date: 3-4-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X__ Other: _____

**Meter Calibration** Date: 3-4-2020 Time:_____ Location: WMSA-SW-A Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA - SW-D

PROJECT NO: 063-7109-960 SAMPLED BY: DW/JP

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4___ 4.5___ 6___ 8___ Other___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

| | |
|---|---|
| Well Total Depth (ft): _____ | Volume in Casing (gal): _____ |
| Depth to Water (ft): _____ | Calculated Purge (volumes / gal.): _____ |
| Height of Water Column (ft): _____ | Actual Pre-Sampling Purge (gal): _____ |

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-X Time: 1200 Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1135 | 15.0 | 730.3 | 8.35 | 7.47 | clear | 0.87 | 182.9 |

Sheen: NONE Odor: NONE Sample Date: 3-4-20

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** _____ **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-SW-E

PROJECT NO: 063-7109-9600 SAMPLED BY: DW

SAMPLE TYPE: Groundwater ~~X~~ DW Surface Water X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump_____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| 1500 | Dry. No Samples. | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | Chlorine (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ____X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 3-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: GH-Seep A
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater ___X___ Surface Water _____ Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____
Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____
Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**
Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____
Purge Water Containment: _____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| 1030 | Dry. | No | Samples | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**
Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | Chlorine (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 5-4-2020 Time: 0900 Location: GH-Seep A Ins. # 13A100053
pH 4: (4.04 / 4.00 @ 20.01 °C) pH 7: (7.02 / 7.00 @ 19.56 °C) pH 10: (10.07 / 10.01 @ 20.10 °C)
D.O. (97.3 / 98.9 @100%) EC (1425 / 1413 µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (1.47 / 1.47 NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 5-4-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: GH- Seep B

PROJECT NO: 063-7109-9[illegible]0 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater ___X___ Surface Water _____ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| 1100 | Dry. | No | Samples. | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | Chlorine (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 5-4-2020

**WATER LEVEL DATA SHEET**
Golder Associates

Project: Lehigh Quarterly 3Q20
Project No.: 063-7109-960
Date(s): Sept 22, 2020
Name: David Walter
Weather: Sunny, warm
Sounder #: 213, 910

| Well | Date | Time | DTW (TOC) | Well Depth | Meas. By | Comments |
|---|---|---|---|---|---|---|
| WMSA-DMW-1S | 9-22-2020 | 1400 | 124.56 | | DW | |
| WMSA-DMW-1D | | 1357 | 125.33 | | | |
| WMSA-DMW-2 | | 1512 | 282.16 | | | |
| WMSA-DMW-3S | | 1237 | 20.49 | | | |
| WMSA-DMW-3D | | 1234 | 20.59 | | | |
| WMSA-DMW-4 | | 1459 | 110.55 | | | |
| WMSA-DMW-5 | | 1431 | 298.66 | | | |
| WMSA-DMW-6 | | 1341 | 334.65 | | | |
| WMSA-DMW-P6A | | 1347 | 78.83 | | | |
| WMSA-DMW-7 | | 1317 | 55.42 | | | |
| WMSA-DMW-8S | | 1244 | 11.79 | | | |
| WMSA-DMW-8D | | 1242 | 13.15 | | | |
| WMSA-DMW-9 | | 1351 | 95.68 | | | |
| WMSA-DMW-10 | | 1322 | 111.41 | | | |
| WMSA-DMW-11 | | 1225 | 39.87 | | | |
| WMSA-DMW-12S | | 1413 | 159.68 | | | |
| EMSA-DMW-12D | | 1410 | 164.78 | | | |
| WMSA-DMW-1S | | 1648 | 44.16 | | | |
| EMSA-DMW-1D | | 1646 | 39.97 | | | |
| EMSA-DMW-2S | | 1629 | 31.56 | | | |
| EMSA-DMW-2D | | 1627 | 31.99 | | | |
| EMSA-DMW-3 | | 1607 | 89.30 | | | |
| EMSA-DMW-4S | | 1557 | 81.75 | | | |
| EMSA-DMW-4D | | 1600 | 112.84 | | | |
| EMSA-DMW-5 | | 1552 | 71.83 | | | |
| EMSA-DMW-6 | | 1548 | 80.98 | | | |
| EMSA-DMW-P6A | | 1539 | 48.41 | | | |
| EMSA-DMW-7 | | 1639 | 10.63 | | | |
| EMSA-DMW-P7A | | 1542 | 37.13 | | | |
| EMSA-DMW-8 | | 1617 | 86.84 | | | |
| EMSA-DMW-9 | | 1654 | 45.54 | | | |
| EMSA-DMW-10S | | 1622 | 115.96 | | | |
| EMSA-DMW-10D | | 1620 | 111.07 | | | |
| BKGD-1 | | — | — | | | Inaccessible. |
| BKGD-2 | | 1704 | 64.17 | | | |

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: EmsA-Dmw-15

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X (DD) 4 4 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 52.00 Sceen Length (ft): 32.52

Depth to Water (ft): 44.27 Total Volume Purged (ml): 3000

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump _____ Electric Submersible Pump _____

Dedicated X Peristaltic Pump X Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP- X Time: 1115 Other _____

EMSA-DUP

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1041 | 200 | 44.27 | 22.7 | 6.68 | 1449 | 0.79 | 0.81 | 33.5 | clear |
| 1044 | ↓ | 44.27 | 22.7 | 6.65 | 1448 | 0.49 | 0.40 | 33.4 | " |
| 1047 | | 44.27 | 22.8 | 6.62 | 1445 | 0.35 | 0.19 | 52.8 | " |
| 1050 | | 44.27 | 22.9 | 6.63 | 1439 | 0.28 | 0.24 | 50.3 | " |
| 1053 | | 44.27 | 22.9 | 6.65 | 1430 | 0.26 | 0.26 | 45.9 | " |
| 1055 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 9-29-2020 Time: 0950 Location: EmsA-15 Ins. # 19k1025[illegible]

pH 4: (4.21 / 4.00 @ 21.6 °C) pH 7: (7.13 / 7.00 @ 21.3 °C) pH 10: (10.16 / 10.00 @ 22.4 °C)

D.O. (105.5 / 98.5 @100%) EC (1402 / 1413 µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 9-29-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-Dmw-2s
PROJECT NO: 063-7109-900 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2X 4____ 4.5____ 6____ 8____ Other____
VOLUME PER LINEAR FOOT(ml) : (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 70.00 Sceen Length (ft): 49.69
Depth to Water (ft): 31.65 Total Volume Purged (ml): 4200

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1234 | 200 | 32.95 | 24.4 | 6.85 | 3589 | 1.74 | 8.48 | 3.3 | cloudy |
| 1237 | ↓ | 33.28 | 24.3 | 6.87 | 4068 | 0.73 | 20.0 | -12.9 | " |
| 1240 | | 33.67 | 24.5 | 6.91 | 4266 | 0.45 | 14.21 | -21.3 | " |
| 1243 | | 34.05 | 24.4 | 6.94 | 4312 | 0.36 | 13.10 | -25.9 | " |
| 1246 | | 34.32 | 24.3 | 6.95 | 4330 | 0.32 | 8.33 | -28.0 | " |
| 1249 | | 34.42 | 24.2 | 6.95 | 4341 | 0.27 | 9.01 | -29.3 | |
| 1252 | | 34.55 | 24.3 | 6.95 | 4338 | 0.25 | 9.45 | -30.6 | |
| 1255 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X____ Other: ____

**Meter Calibration** Date: 9-29-2020 Time:____ Location: EMSA-1S Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 9-29-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-45
PROJECT NO: 063-7109-940 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 151.00 Sceen Length (ft): 128-148
Depth to Water (ft): 81.67 Total Volume Purged (ml): 4800

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1218 | 200 | 83.51 | 21.3 | 7.65 | 625 | 2.81 | 10.64 | 58.4 | cloudy |
| 1221 | | 83.76 | 22.2 | 7.77 | 625 | 1.31 | 5.87 | 31.6 | " |
| 1224 | | 83.99 | 22.6 | 8.03 | 626 | 1.00 | 3.57 | 5.5 | clear |
| 1227 | | 84.26 | 22.8 | 8.21 | 628 | 0.70 | 2.23 | -3.3 | " |
| 1230 | | 84.55 | 23.0 | 8.30 | 627 | 0.65 | 1.63 | -3.1 | " |
| 1233 | | 84.84 | 23.0 | 8.35 | 627 | 0.61 | 1.68 | -1.2 | " |
| 1236 | | 85.05 | 22.9 | 8.36 | 628 | 0.57 | 1.75 | 0.3 | " |
| 1239 | | 85.64 | 22.9 | 8.34 | 627 | 0.55 | 1.83 | 1.4 | " |
| 1242 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 9-30-2020 Time:____ Location: EMSA-8 Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 9-30-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-DMW-8
PROJECT NO: 063-7109-940 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 199.00 Sceen Length (ft): 164-184
Depth to Water (ft): 86.86 Total Volume Purged (ml): 4800

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated X Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: None
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1120 | 200 | 89.24 | 19.6 | 7.86 | 4650 | 0.42 | 1.80 | 0.7 | clear |
| 1123 | ↓ | 90.78 | 19.6 | 7.96 | 4804 | 0.19 | 1.04 | -29.3 | " |
| 1126 | | 91.84 | 19.9 | 7.90 | 4851 | 0.15 | 0.64 | -52.2 | " |
| 1129 | | 92.55 | 20.1 | 7.96 | 4790 | 0.14 | 0.62 | -72.0 | " |
| 1132 | | 93.04 | 20.5 | 7.97 | 4773 | 0.16 | 0.68 | -83.2 | " |
| 1135 | | 93.62 | 20.7 | 8.00 | 4800 | 0.20 | 0.74 | -87.9 | " |
| 1138 | | 94.05 | 21.1 | 8.05 | 4750 | 0.22 | 0.70 | -85.0 | " |
| 1141 | | 94.56 | 20.9 | 8.08 | 4694 | 0.21 | 0.65 | -82.1 | " |
| 1145 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 9.30.2020 Time: 1030 Location: EMSA-8 Ins. # 19K10254
pH 4: (3.91 / 4.00 @20.3 °C) pH 7: (7.01 / 7.00 @20.2 °C) pH 10: (9.89 / ____ @20.8 °C)
D.O. (96.7 / 98.7 @100%) EC (1423 / 1413 µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C. Walter **DATE:** 9.30.2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: EMSA-Dmw-9

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 60.00 Sceen Length (ft): 40-60

Depth to Water (ft): 45.60 Total Volume Purged (ml): 4200

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1135 | 200 | 45.60 | 22.3 | 6.51 | 2912 | 3.55 | 3.81 | -73.3 | clear |
| 1138 | ↓ | 45.60 | 22.8 | 6.48 | 2920 | 1.32 | 1.51 | -64.1 | " |
| 1141 | | 45.60 | 23.0 | 6.48 | 2930 | 1.14 | 1.88 | -58.9 | " |
| 1144 | | 45.60 | 22.9 | 6.47 | 2941 | 1.01 | 1.06 | -56.8 | " |
| 1147 | | 45.60 | 23.0 | 6.46 | 2935 | 1.11 | 0.76 | -55.7 | " |
| 1150 | | 45.60 | 23.0 | 6.46 | 2946 | 1.04 | 0.59 | -55.9 | " |
| 1153 | | 45.60 | 23.0 | 6.46 | 2940 | 0.94 | 0.55 | -56.0 | " |
| 1155 | sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X_ LaMotte Turbidity: ___X____ Other: _____

**Meter Calibration** Date: 9-29-2020 Time:_____ Location: EMSA-LS Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 9-29-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: @EMSA ~~WMSA-SW-A~~

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| 1515 | Dry. No Samples. | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C. Walt **DATE:** 9-29-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-SW-D

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-X Time: 1445 Other _____

EMSA-SW-DUP

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1430 | 20.0 | 1647 | 7.36 | 2.16 | clear | 3.34 | 2.2 |

Sheen: No Odor: No Sample Date: 9-29-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date: 9-29-2020 Time:_____ Location: EmsA-1S Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 9-29-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA - DMW-3S

PROJECT NO: 063-7109-9[illegible]0 SAMPLED BY: Dave Walter

SAMPLE TYPE: Groundwater X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2 X 4____ 4.5____ 6____ 8____ Other____

VOLUME PER LINEAR FOOT(ml) : (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 30 Sceen Length (ft): 10-30

Depth to Water (ft): 20.36 Total Volume Purged (ml): 3600

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump____

Dedicated X Peristaltic Pump ____ Tubing Types ____ Other____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1309 | 200 | 20.55 | 20.3 | 6.91 | 1944 | 0.48 | 2.20 | 29.9 | clear |
| 1312 | 200 | 20.57 | 19.6 | 6.85 | 1938 | 0.33 | 1.98 | 50.0 | clear |
| 1315 | 200 | 20.59 | 19.5 | 6.83 | 1930 | 0.29 | 1.88 | 58.1 | clear |
| 1318 | 200 | 20.61 | 19.4 | 6.82 | 1935 | 0.27 | 1.55 | 63.9 | clear |
| 1321 | 200 | 20.61 | 19.6 | 6.81 | 1931 | 0.22 | 2.10 | 73.2 | Clear |
| 1324 | 200 | 20.61 | 19.5 | 6.82 | 1935 | 0.21 | 2.40 | 74.1 | clear |
| 1327 | Sampled | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X____ Other: ____

**Meter Calibration** Date: 09/28/20 Time:____ Location: WMSA-8S Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walter **DATE:** 9-28-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh _____ SAMPLE ID: WMSA-DMW-85

PROJECT NO: 063-7109-960 _____ SAMPLED BY: DW

SAMPLE TYPE: Groundwater X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 X 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___

VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 30.00 Sceen Length (ft): 10-30

Depth to Water (ft): _____ Total Volume Purged (ml): _____

**PURGE:**

Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump _____

Dedicated X Peristaltic Pump _____ Tubing Types _____ Other _____

Purge Water Containment: None

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1120 | 200 | 11.92 | 20.2 | 6.65 | 1517 | 3.95 | 3.69 | 186.3 | clear |
| 1123 | 200 | 11.90 | 20.1 | 6.68 | 1533 | 3.85 | 1.26 | 183.5 | clear |
| 1126 | 200 | 11.92 | 20.2 | 6.70 | 1541 | 4.05 | 1.26 | 181.0 | clear |
| 1129 | 200 | 11.92 | 20.2 | 6.73 | 1559 | 5.07 | 1.96 | 177.4 | clear |
| 1132 | 200 | 11.92 | 20.2 | 6.75 | 1564 | 4.26 | 1.19 | 175 | clear |
| 1135 | sampled. | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: _____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 9-28-2020 Time: 1040 Location: WMSA-85 Ins. # 19K102541

pH 4: (4.06 / 4.00 @24.0 °C) pH 7: (7.00 / 7.00 @24.2 °C) pH 10: (9.99 / 10.00 @24.3 °C)

D.O. (91.5 / 95.0 @100%) EC (1418 / 1413 µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 9-28-2020

GOLDER

# LOW-FLOW WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-DMW-10
PROJECT NO: 063-7109-960 SAMPLED BY: DW
SAMPLE TYPE: Groundwater X Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4___ 1___ 2X 4___ 4.5___ 6___ 8___ Other___
VOLUME PER LINEAR FOOT(ml): (76) (151) (644) (2,500) (3,150) (5,680) (9,840)

Well Total Depth (ft): 145 Sceen Length (ft): 100-200
Depth to Water (ft): 111.45 Total Volume Purged (ml): 7200

**PURGE:**
Device (Depth of Intake from TOC): Bladder Pump X Electric Submersible Pump ____
Dedicated ✓ Peristaltic Pump ____ Tubing Types ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____Other ____

| TIME (2400 Hr) | RATE (ml/min) | DTW (ft) | Temp. (°C) | pH (std. units) | EC (µS@ 25°C) | DO (mg/l) | Turbidity (NTU) | ORP (mV) | Color / Odor Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1401 | 200 | 113.15 | 21.1 | 7.73 | 555 | 7.92 | 2.27 | 132.9 | Clear |
| 1404 | 200 | 113.15 | 20.9 | 7.63 | 556 | 6.61 | 5.54 | 116.8 | clear/cloudy |
| 1407 | 200 | 113.85 | 21.0 | 7.50 | 553 | 2.02 | 4.38 | 3.5 | Cloudy |
| 1410 | 200 | 114.40 | 20.6 | 7.48 | 558 | 1.00 | 2.02 | -13.5 | cloudy |
| 1413 | 200 | 114.92 | 20.6 | 7.47 | 560 | 0.64 | 1.75 | -70.7 | Cloudy |
| 1416 | 200 | 115.20 | 20.5 | 7.49 | 561 | 0.50 | 3.53 | -101.8 | cloudy |
| 1419 | 200 | 115.83 | 20.6 | 7.52 | 560 | 0.42 | 1.46 | -117.4 | Cloudy |
| 1422 | 200 | 116.41 | 20.4 | 7.55 | 558 | 0.38 | 1.10 | -126.8 | Cloudy/clear |
| 1425 | 200 | 116.94 | 20.6 | 7.52 | 555 | 0.40 | 1.55 | -129.7 | clear |
| 1428 | 200 | 117.23 | 20.8 | 7.54 | 555 | 0.50 | 1.95 | -131.7 | Clear |
| 1431 | 200 | 117.54 | 20.6 | 7.59 | 555 | 0.42 | 1.12 | 133.2 | clear |
| 1434 | 200 | 117.95 | 20.5 | 7.60 | 553 | 0.35 | 1.27 | -134.5 | clear |
| 1437 | Sampled. | | | | | | | | |
| | | | | | | | | | |

Field Measurement Devices: Horiba: ____ YSI: ___X_ LaMotte Turbidity: ___X___ Other: ____

**Meter Calibration** Date: 09/28/20 Time:____ Location: WMS-8S Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

**REMARKS:** ____

**SIGNATURE:** David C Walk **DATE:** 9-28-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-SW-C

PROJECT NO: 063-7109-960 SAMPLED BY: _____

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1245 | 16°C | 2144 | 7.66 | 8.41 | Clear | 1.84 | 153.4 |

Sheen: No Odor: No Sample Date: 9-28-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date: 09/28/20 Time:_____ Location: WMSA-SS Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 9.28.2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WMSA-SW-D

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other_____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| ~~1123~~ | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| 1150 | 16.3 | 2104 | 7.87 | 9.47 | clear | 1.19 | 148.5 |

Sheen: No Odor: No Sample Date: 9-28-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date: 9-28-2020 Time:_____ Location: WMSA-85 Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 9-28-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: EMSA-SW-E

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump____ ____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| 1515 | Dry. | No samples. | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer__ ____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 9-28-2020

GOLDER

# Golder Associates Inc.

Page 1 of 1

## CHAIN OF CUSTODY

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

EDD Required? Yes/No (Yes)

EDF Required? Yes/No (Yes)

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES: Dissolved metals* | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| | | | | | | Preserv. | HNO3 | | |
| WMSA-DMW-3s | | 9-28-2020 | 1135 | W | | | 1 | 1 | |
| WMSA-SW-D | | | 1150 | | | | 1 | 1 | |
| WMSA-SW-C | | | 1245 | | | | 1 | 1 | *Dissolved metals= |
| WMSA-DMW-3s | | | 1327 | | | | 1 | 1 | As, Cd, Cu, Mo, Ni, Se, |
| WMSA-DMW-10 | | | 1437 | | | | 1 | 1 | V, Zn |

| Relinquished by (signature) | Received by (signature) | Date/Time |
|---|---|---|
| David C Walt | | |
| | | |
| | | |

SEND RESULTS TO:

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

GOLDER

**Golder Associates Inc.**

Page 1 of 1

# CHAIN OF CUSTODY

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

EDD Required? Yes/No

EDF Required? Yes/No

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES * Dissolved Metals | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| | | | | | | Preserv. | HNO3 | | |
| EMSA-DMW-1S | | 9-29-2020 | 1055 | W | | | 1 | 1 | |
| EMSA-DMW-9 | | | 1155 | | | | 1 | 1 | |
| EMSA-DUP | | | 1115 | | | | 1 | 1 | * Dissolved metals = As, Cd, Cu, Mo, Ni, Se, V, Zn |
| EMSA-DMW-2S | | | 1255 | | | | 1 | 1 | |
| EMSA-SW-D | | | 1430 | | | | 1 | 1 | |
| EMSA-SW-DUP | | | 1445 | | | | 1 | 1 | |

| Relinquished by (signature): | Received by (signature): | Date/Time: |
|---|---|---|
| David C Walt | | |
| Relinquished by (signature): | Received by (signature): | Date/Time: |
| | | |
| Relinquished by (signature): | Received by (signature): | Date/Time: |
| | | |

SEND RESULTS TO:

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

G:\Sampling\Blank Forms\COC Form.xls

GOLDER

**Golder Associates Inc.**

Page 1 of 1

# CHAIN OF CUSTODY

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

| CONTRACT LABORATORY: | Alpha |
|---|---|
| TURN-AROUND TIME: | Standard |

EDD Required? (Yes) / No

EDF Required? (Yes) / No

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES: Dissolved Metals* | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| | | | | | | Preserv. | HNO3 | | |
| EMSA-DMW-8 | | 9-30-2020 | 1145 | W | | | 1 | | |
| EMSA-DMW-4S | | ↓ | 1242 | ↓ | | | 1 | | |

*Dissolved metals: As, Cd, Cu, Mo, Ni, Se, V, Zn

| Relinquished by (signature): | Received by (signature): | Date/Time: |
|---|---|---|
| David C Walt | | |
| Relinquished by (signature): | Received by (signature): | Date/Time: |
| | | |
| Relinquished by (signature): | Received by (signature): | Date/Time: |
| | | |

**SEND RESULTS TO:**

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

G:\Sampling\Blank Forms\COC Form.xls

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
262 Rickenbacker Circle, Livermore, CA 94551
925-828-6226 F) 925-828-6309

*...l Valley Laboratory*
9090 Union ... Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ Page_____of_____

| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | SEEP Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | Project No: Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# 063-71099-23 |
| **Phone/Fax:** (408) 220-9233 | Site Contact: David Walter |

Signature below authorizes work under terms stated on reverse side.

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter | | | | | | | | | | | | | | | | 624 CTR Group List | 625 CTR SVOC Group | 625 CTR PNA SIM | 608 CTR Pest & PCBs (pw) | 8015 TPH DMO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide (sw) | Equis EDD | J Flags | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | | | | | | | | | | | | | | | |
| GH-Seep-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | |
| GH-Seep-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| GH-Seep-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-Seep-A | 5-5-2020 | 1215 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-Seep-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-Seep-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-Seep-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Duplicate | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trip Blank - Ground Water | | | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | | |

Se with a RL of 2ug/l required for this project.

Turn Around Time: 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C. Walter | | 5-5-2020 | 1445 |
| | | | |
| | | | |
| | | | |
| | | | |

samples were field-filtered foir dissolved analytes

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes ( ) No (x)

Sampling Company Log Code:_____

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WC-Seep A

PROJECT NO: 063-7109-950 SAMPLED BY: DW

SAMPLE TYPE: Groundwater ___X___ Surface Water _____ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | ~~Chlorine (mg/l)~~ ORP (mv) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| 1215 | 14.15 | <1 (~.5) | 8.23 | 188.2 | 833 | 4.91 | 7.30 71.3 |

Sheen: No Odor: No Sample Date: 5-5-2020

Field Measurement Devices: Horiba: _____ YSI: ___X___ LaMotte Turbidity: ___X___ Other: _____

**Meter Calibration** Date: 5-5-2020 Time: 0900 Location: WC-Seep A Ins. # 13A100053

pH 4: (4.02 / 4.00 @ 19.75 °C) pH 7: (7.00 / 7.00 @ 19.63 °C) pH 10: (10.02 / 10.00 @ 19.79 °C)

D.O. (98.9 / 98.9 @100%) EC (1415 / 1413 µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (1.37 / 1.37 NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walter **DATE:** 5-5-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WC- Seep B

PROJECT NO: 063-7109-950 SAMPLED BY:

SAMPLE TYPE: Groundwater ___X___ Surface Water _____ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (NTUs) | Chlorine (mg/l) | Observation |
|---|---|---|---|---|---|---|---|---|
| 1030 | Dry. No | samples | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

| Time (2400 Hr) | Temp. (°C) | Flow (gpm) | pH (std. units) | Chlorine (mg/l) | EC (µmhos/cm) | Turbidity (NTU) | DO (mg/l) (%) |
|---|---|---|---|---|---|---|---|
| 1030 | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: ____X___ LaMotte Turbidity: ____X___ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

**REMARKS:** _____

**SIGNATURE:** David C Walt **DATE:** 5-5-2020

GOLDER

# WATER SAMPLE FIELD DATA

LOCATION: Lehigh SAMPLE ID: WC- Seep D

PROJECT NO: 063-7109-960 SAMPLED BY: DW

SAMPLE TYPE: Groundwater _____ Surface Water ___X___ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other_____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

**PURGE:**

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump_____ Dedicated _____ Other_____

Purge Water Containment: NONE

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

| Time (2400 Hr) | Volume (gallons) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | Color (visual) | Turbidity (visual) | Other | Observation |
|---|---|---|---|---|---|---|---|---|
| 1100 | Dry. No Samples. | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Purge Date: _____

**SAMPLE:**

Device (Depth of Intake from TOC): Disp. Bailer____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other _____

| Time (2400 Hr) | Temp. (°C) | EC (µmhos/cm) | pH (std. units) | DO (mg/l) | Color (visual) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba:_____ YSI: ___X___ LaMotte Turbidity: ____X__ Other: _____

**Meter Calibration** Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

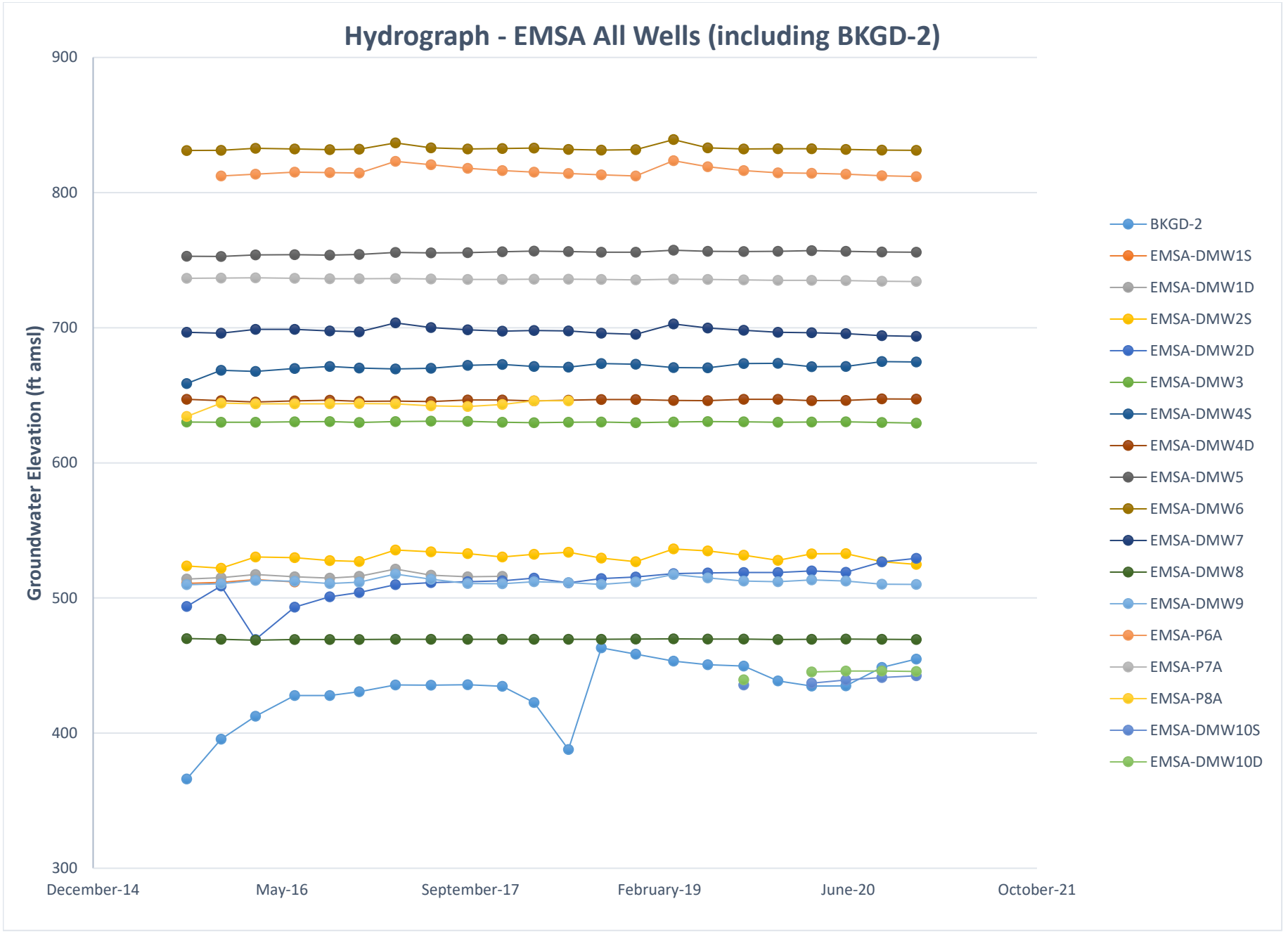
ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

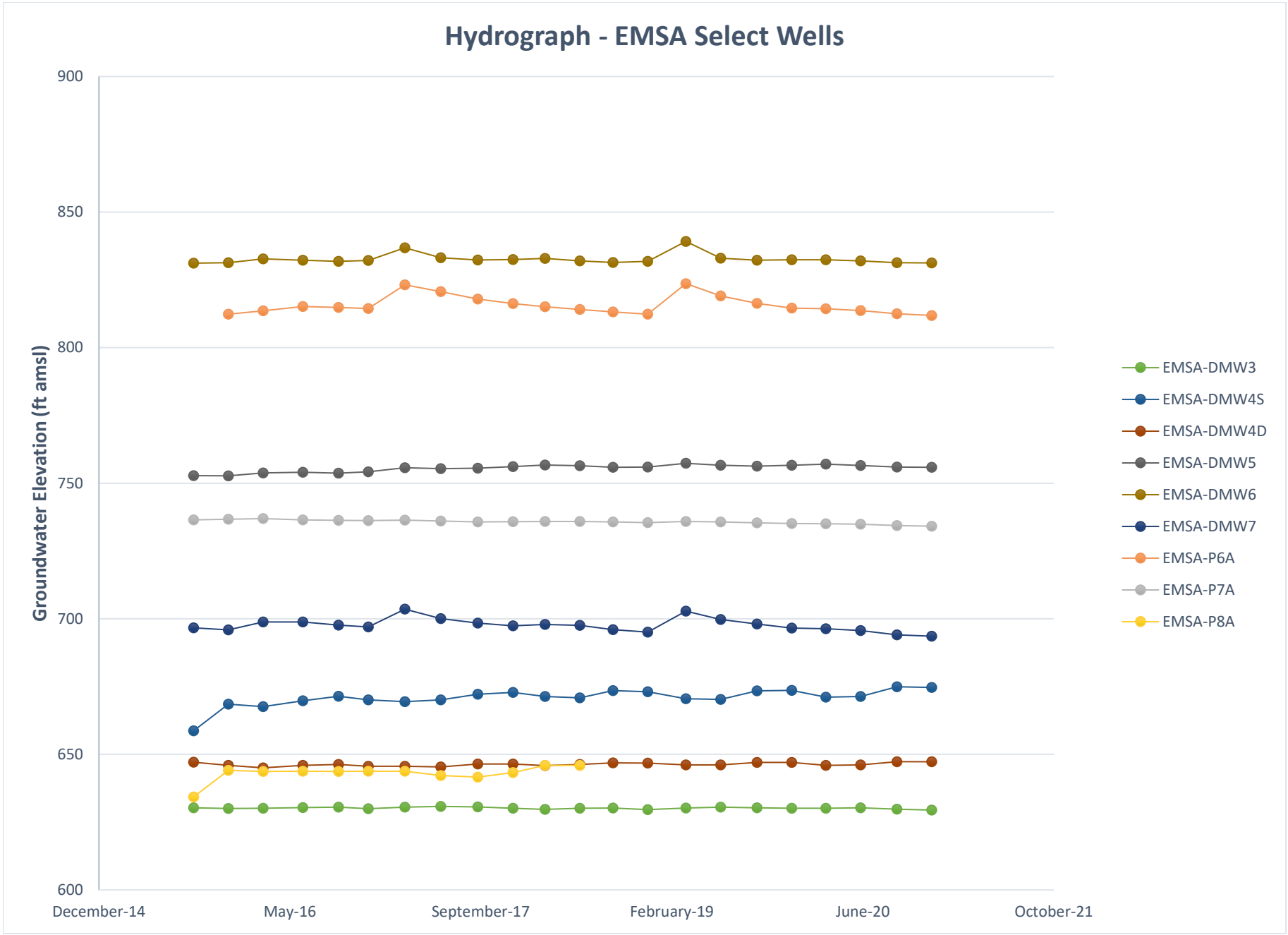
**REMARKS:** _____

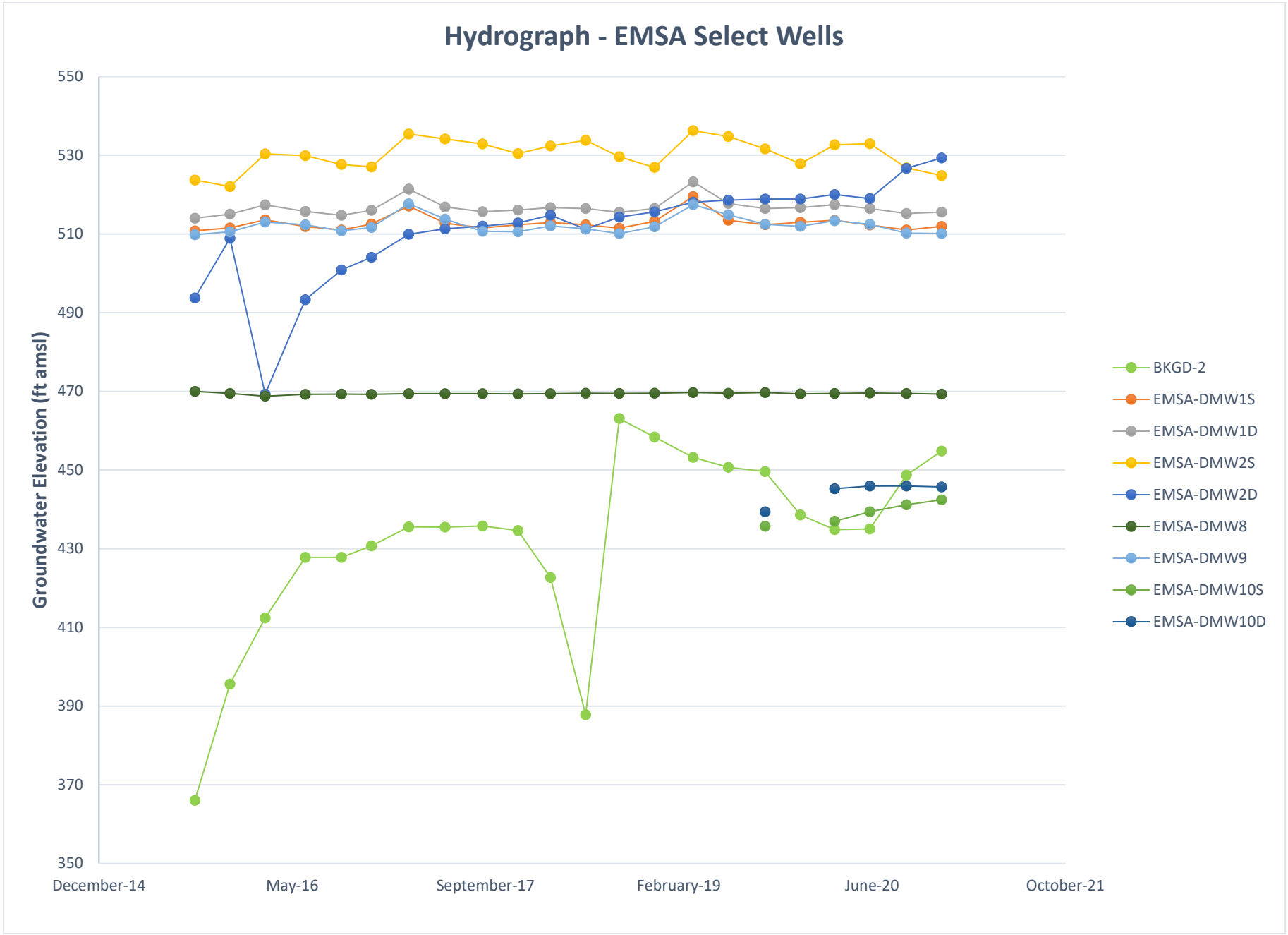
**SIGNATURE:** David C Walt **DATE:** 5-5-2020

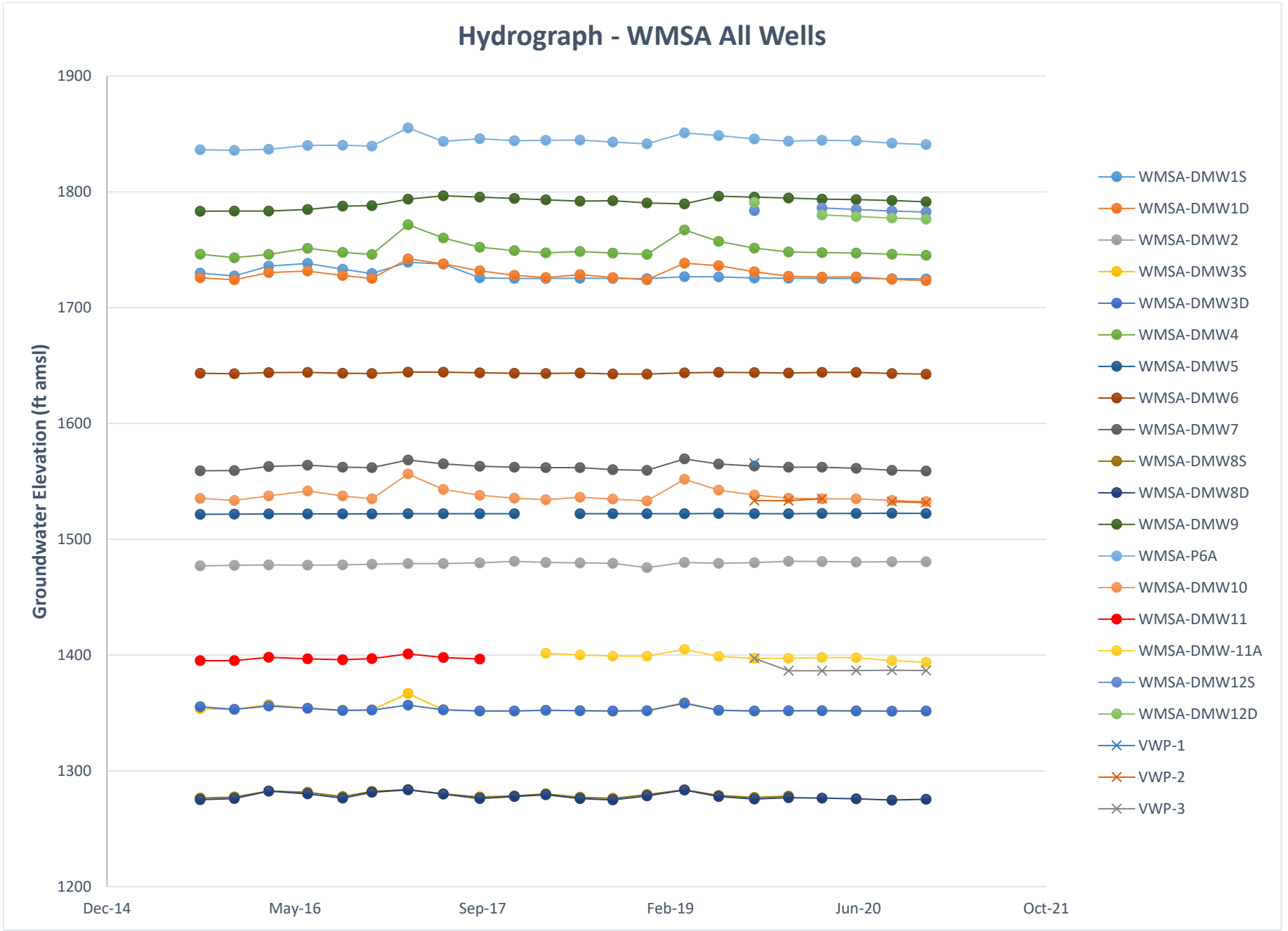
APPENDIX B

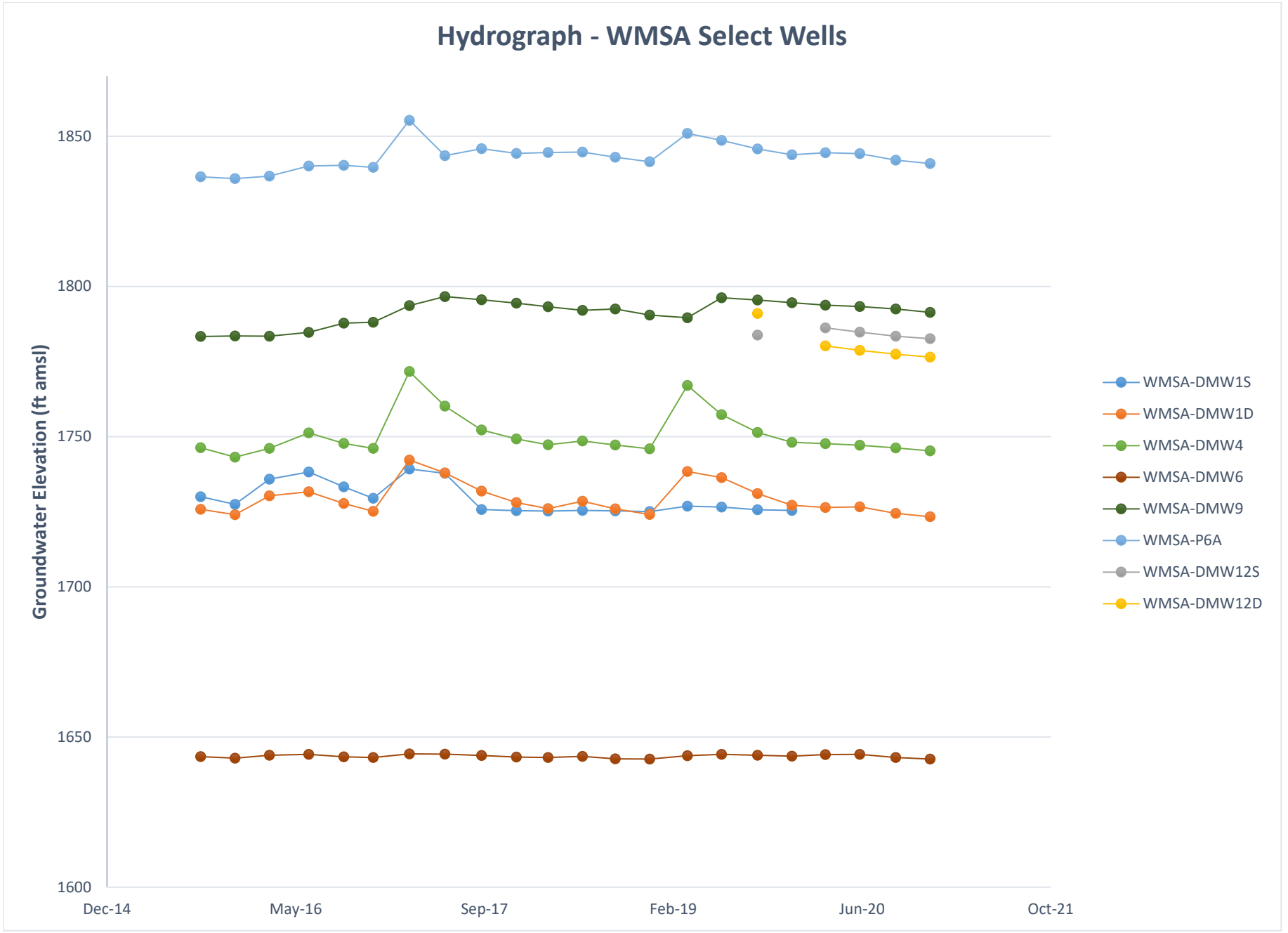
# Hydrographs

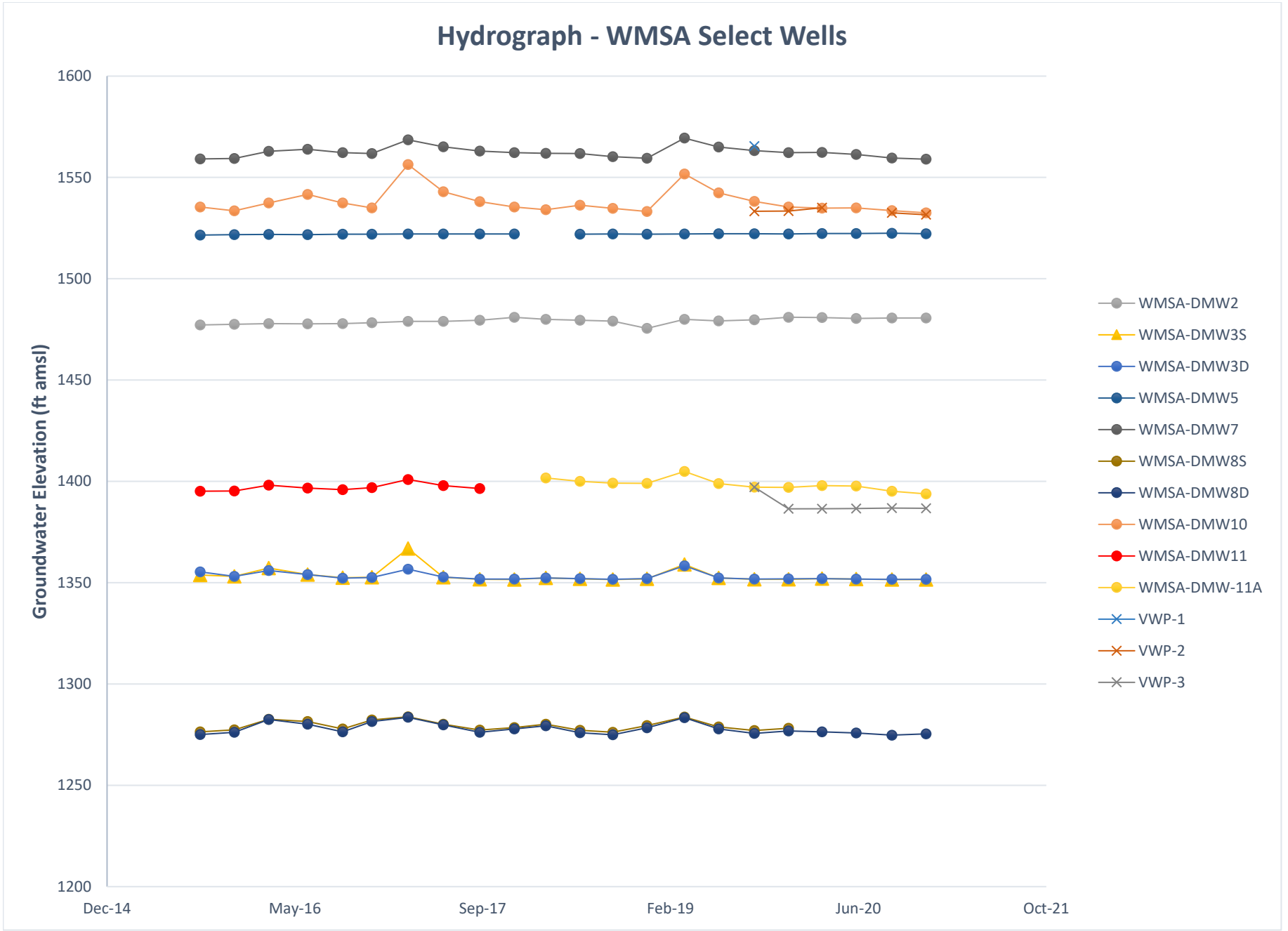

Hydrograph - EMSA All Wells (including BKGD-2)
Groundwater Elevation (ft amsl)
900
800
700
600
500
400
300
December-14
May-16
September-17
February-19
June-20
October-21
BKGD-2
EMSA-DMW1S
EMSA-DMW1D
EMSA-DMW2S
EMSA-DMW2D
EMSA-DMW3
EMSA-DMW4S
EMSA-DMW4D
EMSA-DMW5
EMSA-DMW6
EMSA-DMW7
EMSA-DMW8
EMSA-DMW9
EMSA-P6A
EMSA-P7A
EMSA-P8A
EMSA-DMW10S
EMSA-DMW10D


Hydrograph - EMSA Select Wells
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
December-14
May-16
September-17
February-19
June-20
October-21
EMSA-DMW3
EMSA-DMW4S
EMSA-DMW4D
EMSA-DMW5
EMSA-DMW6
EMSA-DMW7
EMSA-P6A
EMSA-P7A
EMSA-P8A


Hydrograph - EMSA Select Wells
Groundwater Elevation (ft amsl)
550
530
510
490
470
450
430
410
390
370
350
December-14
May-16
September-17
February-19
June-20
October-21
BKGD-2
EMSA-DMW1S
EMSA-DMW1D
EMSA-DMW2S
EMSA-DMW2D
EMSA-DMW8
EMSA-DMW9
EMSA-DMW10S
EMSA-DMW10D


Hydrograph - WMSA All Wells
Groundwater Elevation (ft amsl)
1900
1800
1700
1600
1500
1400
1300
1200
Dec-14
May-16
Sep-17
Feb-19
Jun-20
Oct-21
WMSA-DMW1S
WMSA-DMW1D
WMSA-DMW2
WMSA-DMW3S
WMSA-DMW3D
WMSA-DMW4
WMSA-DMW5
WMSA-DMW6
WMSA-DMW7
WMSA-DMW8S
WMSA-DMW8D
WMSA-DMW9
WMSA-P6A
WMSA-DMW10
WMSA-DMW11
WMSA-DMW-11A
WMSA-DMW12S
WMSA-DMW12D
VWP-1
VWP-2
VWP-3


Hydrograph - WMSA Select Wells
Groundwater Elevation (ft amsl)
1850
1800
1750
1700
1650
1600
Dec-14
May-16
Sep-17
Feb-19
Jun-20
Oct-21
WMSA-DMW1S
WMSA-DMW1D
WMSA-DMW4
WMSA-DMW6
WMSA-DMW9
WMSA-P6A
WMSA-DMW12S
WMSA-DMW12D


Hydrograph - WMSA Select Wells
Groundwater Elevation (ft amsl)
1600
1550
1500
1450
1400
1350
1300
1250
1200
Dec-14
May-16
Sep-17
Feb-19
Jun-20
Oct-21
WMSA-DMW2
WMSA-DMW3S
WMSA-DMW3D
WMSA-DMW5
WMSA-DMW7
WMSA-DMW8S
WMSA-DMW8D
WMSA-DMW10
WMSA-DMW11
WMSA-DMW-11A
VWP-1
VWP-2
VWP-3

**APPENDIX C**

# Laboratory Analytical Reports

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

23 October 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20J0886

Enclosed are the results of analyses for samples received by the laboratory on 10/06/20 23:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | 063-7109-960 | 10/23/20 10:50 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-8 | 20J0886-01 | Water | 09/30/20 11:45 | 10/06/20 23:00 |
| EMSA-DMW-4s | 20J0886-02 | Water | 09/30/20 12:42 | 10/06/20 23:00 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:50 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-8 (20J0886-01) Water Sampled: 09/30/20 11:45 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **6.0** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Copper, dissolved** | **5.3** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | |
| **Molybdenum, dissolved** | **24** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 15:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-4s (20J0886-02) Water Sampled: 09/30/20 12:42 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **6.3** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 20:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **69** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Selenium, dissolved** | **0.61** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 20:42 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:08 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:50 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AJ03494-BLK1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Molybdenum, dissolved | ND | 0.070 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Vanadium, dissolved | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AJ03494-BS1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 21.6 | 0.060 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Copper, dissolved | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Molybdenum, dissolved | 21.3 | 0.070 | 0.25 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Nickel, dissolved | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Selenium, dissolved | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Vanadium, dissolved | 21.0 | 0.50 | 1.0 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Zinc, dissolved | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AJ03494-DUP1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 5.20 | 0.80 | 1.0 | ug/L | | 6.01 | | | 14.4 | 20 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | 4.81 | 0.80 | 1.0 | ug/L | | 5.30 | | | 9.68 | 20 | |
| Molybdenum, dissolved | 24.9 | 0.14 | 0.50 | ug/L | | 23.7 | | | 4.93 | 20 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |
| Vanadium, dissolved | ND | 1.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 8.0 | 10 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:50 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AJ03494-MS1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | | | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper, dissolved | 24.9 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.1 | 70-130 | | | |
| Molybdenum, dissolved | 46.0 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 111 | 70-130 | | | |
| Nickel, dissolved | 20.8 | 3.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | | | |
| Vanadium, dissolved | 19.2 | 5.0 | 10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Zinc, dissolved | 97.3 | 40 | 50 | ug/L | 100 | ND | 97.3 | 70-130 | | | |
| **Matrix Spike (AJ03494-MS2)** | | **Source: 20J1130-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 26.5 | 4.0 | 5.0 | ug/L | 20.0 | 4.32 | 111 | 70-130 | | | |
| Cadmium, dissolved | 20.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Copper, dissolved | 20.7 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Molybdenum, dissolved | 22.1 | 0.70 | 2.5 | ug/L | 20.0 | 0.798 | 106 | 70-130 | | | |
| Nickel, dissolved | 25.9 | 3.0 | 5.0 | ug/L | 20.0 | 6.12 | 98.8 | 70-130 | | | |
| Selenium, dissolved | 26.0 | 3.0 | 20 | ug/L | 20.0 | 4.93 | 105 | 70-130 | | | |
| Vanadium, dissolved | 20.2 | 5.0 | 10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 98.9 | 40 | 50 | ug/L | 100 | ND | 98.9 | 70-130 | | | |
| **Matrix Spike Dup (AJ03494-MSD1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.6 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | 0.239 | 20 | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.296 | 20 | |
| Copper, dissolved | 25.1 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.8 | 70-130 | 0.595 | 20 | |
| Molybdenum, dissolved | 46.1 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 112 | 70-130 | 0.221 | 20 | |
| Nickel, dissolved | 20.6 | 3.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 1.10 | 20 | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | 0.160 | 20 | |
| Vanadium, dissolved | 19.3 | 5.0 | 10 | ug/L | 20.0 | ND | 96.3 | 70-130 | 0.388 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 0.604 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | 063-7109-960 | 10/23/20 10:50 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

2.9

GOLDER

Golder Associates Inc.

2050886

Page 1 of 1

# CHAIN OF CUSTODY

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

EDD Required? Yes/No (Yes)

EDF Required? Yes/No (Yes)

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES: Dissolved Metals* | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| EMSA-DMW-8 | | 9-30-2020 | 1145 | W | | Preserv. | HNO3 | 1 | |
| EMSA-DMW-4S | | ↓ | 1242 | ↓ | | | 1 | 1 | |

*Dissolved metals: As, Cd, Cu, Mo, Ni, Se, V, Zn

| Relinquished by (signature): | Received by (signature): | Date/Time: |
|---|---|---|
| David C Walt | [signature] | 10/6/20 1534 |
| [signature] | ED | 10/6/20 1900 |
| ED | ED | 10/6/20 2300 |

SEND RESULTS TO:

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

G:\Sampling\Blank Forms\COC Form.xls

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

23 October 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20J1127

Enclosed are the results of analyses for samples received by the laboratory on 10/06/20 23:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:42 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-1s | 20J1127-01 | Water | 09/29/20 10:55 | 10/06/20 23:00 |
| EMSA-DMW-9 | 20J1127-02 | Water | 09/29/20 11:55 | 10/06/20 23:00 |
| EMSA-DUP | 20J1127-03 | Water | 09/29/20 11:15 | 10/06/20 23:00 |
| EMSA-DMW-2s | 20J1127-04 | Water | 09/29/20 12:55 | 10/06/20 23:00 |
| EMSA-SW-D | 20J1127-05 | Water | 09/29/20 14:30 | 10/06/20 23:00 |
| EMSA-SW-DUP | 20J1127-06 | Water | 09/29/20 14:45 | 10/06/20 23:00 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20J1127-01) Water Sampled: 09/29/20 10:55 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **4.8** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | R-01, J |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 20:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **3.4** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **9.1** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **0.92** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 20:59 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | U, R-01 |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:17 | EPA 200.8 | SMP | 1551 | U, R-01 |
| **EMSA-DMW-9 (20J1127-02) Water Sampled: 09/29/20 11:55 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **11** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:16 | EPA 200.8 | SMP | 1551 | U, R-01 |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | U, R-01 |
| **Molybdenum, dissolved** | **2.6** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **5.8** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **0.97** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:16 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DUP (20J1127-03) Water Sampled: 09/29/20 11:15 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **4.2** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | R-01, J |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **3.0** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **9.3** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **0.94** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:33 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:34 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20J1127-04) Water Sampled: 09/29/20 12:55 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:50 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **4.0** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **4.0** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Selenium, dissolved** | **1.2** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 21:50 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-D (20J1127-05) Water Sampled: 09/29/20 14:30 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **4.6** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, J |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 22:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **52** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **7.8** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **1.4** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 22:07 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-DUP (20J1127-06) Water Sampled: 09/29/20 14:45 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **4.9** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | R-01, J |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 22:24 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **52** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **7.7** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **1.1** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 22:24 | EPA 200.8 | SMP | 1551 | R-01, J |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 17:59 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AJ03494-BLK1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Molybdenum, dissolved | ND | 0.070 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Vanadium, dissolved | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AJ03494-BS1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 21.6 | 0.060 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Copper, dissolved | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Molybdenum, dissolved | 21.3 | 0.070 | 0.25 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Nickel, dissolved | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Selenium, dissolved | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Vanadium, dissolved | 21.0 | 0.50 | 1.0 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Zinc, dissolved | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AJ03494-DUP1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 5.20 | 0.80 | 1.0 | ug/L | | 6.01 | | | 14.4 | 20 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | 4.81 | 0.80 | 1.0 | ug/L | | 5.30 | | | 9.68 | 20 | |
| Molybdenum, dissolved | 24.9 | 0.14 | 0.50 | ug/L | | 23.7 | | | 4.93 | 20 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |
| Vanadium, dissolved | ND | 1.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 8.0 | 10 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AJ03494-MS1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | | | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper, dissolved | 24.9 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.1 | 70-130 | | | |
| Molybdenum, dissolved | 46.0 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 111 | 70-130 | | | |
| Nickel, dissolved | 20.8 | 3.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | | | |
| Vanadium, dissolved | 19.2 | 5.0 | 10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Zinc, dissolved | 97.3 | 40 | 50 | ug/L | 100 | ND | 97.3 | 70-130 | | | |
| **Matrix Spike (AJ03494-MS2)** | | **Source: 20J1130-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 26.5 | 4.0 | 5.0 | ug/L | 20.0 | 4.32 | 111 | 70-130 | | | |
| Cadmium, dissolved | 20.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Copper, dissolved | 20.7 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Molybdenum, dissolved | 22.1 | 0.70 | 2.5 | ug/L | 20.0 | 0.798 | 106 | 70-130 | | | |
| Nickel, dissolved | 25.9 | 3.0 | 5.0 | ug/L | 20.0 | 6.12 | 98.8 | 70-130 | | | |
| Selenium, dissolved | 26.0 | 3.0 | 20 | ug/L | 20.0 | 4.93 | 105 | 70-130 | | | |
| Vanadium, dissolved | 20.2 | 5.0 | 10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 98.9 | 40 | 50 | ug/L | 100 | ND | 98.9 | 70-130 | | | |
| **Matrix Spike Dup (AJ03494-MSD1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.6 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | 0.239 | 20 | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.296 | 20 | |
| Copper, dissolved | 25.1 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.8 | 70-130 | 0.595 | 20 | |
| Molybdenum, dissolved | 46.1 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 112 | 70-130 | 0.221 | 20 | |
| Nickel, dissolved | 20.6 | 3.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 1.10 | 20 | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | 0.160 | 20 | |
| Vanadium, dissolved | 19.3 | 5.0 | 10 | ug/L | 20.0 | ND | 96.3 | 70-130 | 0.388 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 0.604 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | 063-7109-960 | 10/23/20 10:42 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

20J1127 2.9

# Golder Associates Inc.

Page 1 of 1

## CHAIN OF CUSTODY

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

EDD Required? (Yes/No)

EDF Required? (Yes/No)

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES * Dissolved metals | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| | | | | | | Preserv. | HNO3 | | |
| EMSA-DMW-1S | | 9-29-2020 | 1055 | W | | | 1 | 1 | |
| EMSA-DMW-9 | | ↓ | 1155 | ↓ | | | 1 | 1 | |
| EMSA-DUP | | | 1115 | | | | 1 | 1 | * Dissolved metals = As, Cd, Cu, Mo, Ni, Se, V, Zn |
| EMSA-DMW-2S | | | 1255 | | | | 1 | 1 | |
| EMSA-SW-D | | | 1430 | | | | 1 | 1 | |
| EMSA-SW-DUP | | ↓ | 1445 | ↓ | | | 1 | 1 | |

| Relinquished by (signature): | Received by (signature): | Date/Time: |
|---|---|---|
| David C Walt | [signature] | 10/6/20 1534 |
| [signature] | EO | 10/6/20 1900 |
| EO | EO | 10/6/20 2300 |

SEND RESULTS TO:

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

G:\Sampling\Blank Forms\COC Form.xls

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

23 October 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20J1130

Enclosed are the results of analyses for samples received by the laboratory on 10/06/20 23:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:47 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-8s | 20J1130-01 | Water | 09/28/20 11:35 | 10/06/20 23:00 |
| WMSA-SW-D | 20J1130-02 | Water | 09/28/20 11:50 | 10/06/20 23:00 |
| WMSA-SW-C | 20J1130-03 | Water | 09/28/20 12:45 | 10/06/20 23:00 |
| WMSA-DMW-3s | 20J1130-04 | Water | 09/28/20 13:27 | 10/06/20 23:00 |
| WMSA-DMW-10 | 20J1130-05 | Water | 09/28/20 14:37 | 10/06/20 23:00 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:47 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20J1130-01) Water Sampled: 09/28/20 11:35 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **4.3** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | R-01, J |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 23:32 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **0.80** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Nickel, dissolved** | **6.1** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **4.9** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 23:32 | EPA 200.8 | SMP | 1551 | |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | U, R-01 |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 16:08 | EPA 200.8 | SMP | 1551 | U, R-01 |
| **WMSA-SW-D (20J1130-02) Water Sampled: 09/28/20 11:50 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **6.8** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 23:50 | EPA 200.8 | SMP | 1551 | U, R-01 |
| **Copper, dissolved** | **7.1** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | |
| **Molybdenum, dissolved** | **3.0** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **8.1** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **7.7** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/20/20 23:50 | EPA 200.8 | SMP | 1551 | |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | U, R-01 |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| **WMSA-SW-C (20J1130-03) Water Sampled: 09/28/20 12:45 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **6.8** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 14:23 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **3.0** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | |
| **Nickel, dissolved** | **9.0** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **8.2** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 14:23 | EPA 200.8 | SMP | 1551 | |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:16 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:47 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20J1130-04) Water Sampled: 09/28/20 13:27 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| **Arsenic, dissolved** | **5.4** | **4.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 14:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **1.1** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Nickel, dissolved** | **10** | **3.0** | **5.0** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **4.7** | **0.60** | **4.0** | **ug/L** | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 14:49 | EPA 200.8 | SMP | 1551 | |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| **WMSA-DMW-10 (20J1130-05) Water Sampled: 09/28/20 14:37 Received: 10/06/20 23:00** | | | | | | | | | | | | |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 15:14 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Molybdenum, dissolved** | **4.6** | **0.70** | **2.5** | **ug/L** | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AJ03494 | 10/16/20 10:55 | 10/21/20 15:14 | EPA 200.8 | SMP | 1551 | R-01, U |
| Vanadium, dissolved | ND | 5.0 | 10 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AJ03494 | 10/16/20 10:55 | 10/20/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:47 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AJ03494-BLK1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Molybdenum, dissolved | ND | 0.070 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Vanadium, dissolved | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AJ03494-BS1)** | | | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 21.6 | 0.060 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Copper, dissolved | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Molybdenum, dissolved | 21.3 | 0.070 | 0.25 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Nickel, dissolved | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Selenium, dissolved | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Vanadium, dissolved | 21.0 | 0.50 | 1.0 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Zinc, dissolved | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AJ03494-DUP1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 5.20 | 0.80 | 1.0 | ug/L | | 6.01 | | | 14.4 | 20 | |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | 4.81 | 0.80 | 1.0 | ug/L | | 5.30 | | | 9.68 | 20 | |
| Molybdenum, dissolved | 24.9 | 0.14 | 0.50 | ug/L | | 23.7 | | | 4.93 | 20 | |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |
| Vanadium, dissolved | ND | 1.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 8.0 | 10 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: 063-7109-960 | 10/23/20 10:47 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AJ03494 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AJ03494-MS1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | | | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper, dissolved | 24.9 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.1 | 70-130 | | | |
| Molybdenum, dissolved | 46.0 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 111 | 70-130 | | | |
| Nickel, dissolved | 20.8 | 3.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | | | |
| Vanadium, dissolved | 19.2 | 5.0 | 10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Zinc, dissolved | 97.3 | 40 | 50 | ug/L | 100 | ND | 97.3 | 70-130 | | | |
| **Matrix Spike (AJ03494-MS2)** | | **Source: 20J1130-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 26.5 | 4.0 | 5.0 | ug/L | 20.0 | 4.32 | 111 | 70-130 | | | |
| Cadmium, dissolved | 20.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Copper, dissolved | 20.7 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Molybdenum, dissolved | 22.1 | 0.70 | 2.5 | ug/L | 20.0 | 0.798 | 106 | 70-130 | | | |
| Nickel, dissolved | 25.9 | 3.0 | 5.0 | ug/L | 20.0 | 6.12 | 98.8 | 70-130 | | | |
| Selenium, dissolved | 26.0 | 3.0 | 20 | ug/L | 20.0 | 4.93 | 105 | 70-130 | | | |
| Vanadium, dissolved | 20.2 | 5.0 | 10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 98.9 | 40 | 50 | ug/L | 100 | ND | 98.9 | 70-130 | | | |
| **Matrix Spike Dup (AJ03494-MSD1)** | | **Source: 20J0886-01** | | | Prepared: 10/16/20 Analyzed: 10/20/20 | | | | | | |
| Arsenic, dissolved | 27.6 | 4.0 | 5.0 | ug/L | 20.0 | 6.01 | 108 | 70-130 | 0.239 | 20 | |
| Cadmium, dissolved | 20.2 | 0.60 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.296 | 20 | |
| Copper, dissolved | 25.1 | 4.0 | 5.0 | ug/L | 20.0 | 5.30 | 98.8 | 70-130 | 0.595 | 20 | |
| Molybdenum, dissolved | 46.1 | 0.70 | 2.5 | ug/L | 20.0 | 23.7 | 112 | 70-130 | 0.221 | 20 | |
| Nickel, dissolved | 20.6 | 3.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 1.10 | 20 | |
| Selenium, dissolved | 22.0 | 3.0 | 20 | ug/L | 20.0 | ND | 110 | 70-130 | 0.160 | 20 | |
| Vanadium, dissolved | 19.3 | 5.0 | 10 | ug/L | 20.0 | ND | 96.3 | 70-130 | 0.388 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 0.604 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | 063-7109-960 | 10/23/20 10:47 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

GOLDER

# Golder Associates Inc.

## CHAIN OF CUSTODY

Page 1 of 1

Quotation No.

| PROJECT AND PHASE NO.: | SITE NAME: |
|---|---|
| 063-7109-960 | Lehigh 3Q20 |

SAMPLER SIGNATURE(S): David Walter David C Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

EDD Required? Yes/No

EDF Required? Yes/No

| Sample ID | Lab ID | Collection Date | Collection Time | Matrix | Depth | Container Info | ANALYSES: Dissolved metals* | Cont. Qty. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type | Poly | | |
| | | | | | | Volume | 250ml | | |
| | | | | | | Filter | Y | | |
| | | | | | | Preserv. | HNO3 | | |
| WMSA-DMW-8S | | 9-28-2020 | 1135 | W | | | 1 | 1 | |
| WMSA-SW-D | | | 1150 | | | | 1 | 1 | |
| WMSA-SW-C | | | 1245 | | | | 1 | 1 | *Dissolved metals= |
| WMSA-DMW-3S | | | 1327 | | | | 1 | 1 | As, Cd, Cu, Mo, Ni, Se, |
| WMSA-DMW-10 | | | 1437 | | | | 1 | 1 | V, Zn |

| Relinquished by (signature): | Received by (signature): | Date/Time: |
|---|---|---|
| David C Walt | [signature] | 10/6/20 1534 |
| [signature] | EO | 10/6/20 1900 |
| EO | EO | 10/6/20 2300 |

SEND RESULTS TO:

Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

G:\Sampling\Blank Forms\COC Form.xls

**APPENDIX D**

# First Quarter 2020 Summary and Data

**Appendix D: Summary of Q1 2020 Groundwater Analytical Results**
**Lehigh Permanente Site**



| Analyte | Site ID / Sample Date / Method | EMSA-DMW-1S 3/17/2020 Result | Q | EMSA-DMW-1D 3/17/2020 Result | Q | EMSA-DMW-2S 03/19/2020 Result | Q | EMSA-DMW-2D 03/19/2020 Result | Q | EMSA-DMW-3 03/24/2020 Result | Q | EMSA-DMW-4S 03/24/2020 Result | Q | EMSA-DMW-4D 03/24/2020 Result | Q | EMSA-DMW-5 03/24/2020 Result | Q | EMSA-DMW-6 03/09/2020 Result | Q | EMSA-DMW-7 03/31/2020 Result | Q | EMSA-DMW-8 03/19/2020 Result | Q | EMSA-DMW-9 03/17/2020 Result | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Metals, Dissolved (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | 3.7 | J | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 6.0 | | 4.6 | J | <4.0 | | <4.0 | | <4.0 | | 98 | | 4.5 | J | 7.5 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Hexavalent Chromium | E218.6 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <3.0 | | <0.30 | | <0.30 | |
| Copper | E200.8 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 0.78 | J | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | |
| Mercury (ngL) | E1631 | <2.00 | | <0.200 | | <0.200 | | <0.200 | | <2.00 | | 0.348 | J | 0.239 | J | <0.200 | | <2.00 | | <2.00 | | <0.200 | | <2.00 | |
| Nickel | E200.8 | 10 | | <3.0 | | 3.9 | J | <3.0 | | 15 | | <3.0 | | <3.0 | | <3.0 | | <3.0 | | 37 | | <3.0 | | 7.1 | |
| Selenium | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 2.7 | J | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 52 | | <0.60 | | <0.60 | |
| Silver | E200.8 | <0.10 | | <0.10 | | 0.12 | J | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | |
| **Metals, Total (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | 5.4 | | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 14 | | 5.5 | | <4.0 | | 4.3 | J | 4.7 | J | 100 | | 4.7 | J | 7.2 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | 0.34 | | <0.12 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | 17 | | <5.0 | | <5.0 | |
| Hexavalent Chromium | E218.6 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <3.0 | | <0.30 | | <0.30 | |
| Copper | E200.8 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 13 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 18 | | <4.0 | | <4.0 | |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 0.87 | J | <0.60 | | <0.60 | |
| Mercury (ng/L) | E1631 | <2.00 | | 0.314 | J | 2.51 | J | 1.47 | | 2.98 | | 0.976 | | 0.775 | | <0.200 | | <2.00 | | <20.0 | | 0.298 | J | <2.00 | |
| Nickel | E200.8 | 11 | | <3.0 | | 5.7 | | 3.1 | J | 18 | | <3.0 | | <3.0 | | <3.0 | | 3.3 | J | 42 | | <3.0 | | 8.7 | |
| Selenium | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 3.5 | J | <0.60 | | <0.60 | | <0.60 | | <0.60 | | 53 | | <0.60 | | <0.60 | |
| Silver | E200.8 | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | 60 | | <40 | | <40 | |
| **VOCs (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 624/624.1 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 0.37 | | <0.30 | | <0.30 | |
| **SVOCs (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diethyl Phthalate | 625/625.1 | 0.39 | J | 0.58 | J | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 0.48 | J |
| Di-n-Butyl Phthalate | 625/625.1 | 2.9 | J | 3.8 | J | 1.7 | J-1 | 1.6 | J | <0.90 | | <0.90 | | <0.90 | | <0.90 | | 1.6 | J | 2.5 | J | 3.3 | J | 4.0 | J |
| Phenol | 625/625.1 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | 1.4 | | <0.50 | | <0.50 | |
| **TPH (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| TPH as Gasoline | SW8260B | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | |
| TPH-Diesel | SW8015B | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | 110 | J | <50 | | <50 | | <50 | | <50 | |
| TPH-Heavy Oils | SW8015B | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | |
| **Cyanide (mg/L)** | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | 0.0026 | J | <0.0020 | | <0.0020 | | <0.0020 | | 0.0033 | | 0.0027 | J | <0.0020 | | 0.0024 | J |

Notes:
< = Analyte NOT DETECTED at or above the laboratory method detection limit
J = estimated value below the laboratory reporting limit.
gray shading = leachate monitoring well

**Appendix D: Summary of Q1 2020 Groundwater Analytical Results**
**Lehigh Permanente Site**



| Analyte | Site ID / Sample Date / Method | WMSA-DMW-1S 03/23/2020 Result | Q | WMSA-DMW-1D 03/23/2020 Result | Q | WMSA-DMW-2 03/09/2020 Result | Q | WMSA-DMW-3S 03/03/2020 Result | Q | WMSA-DMW-3D 03/03/2020 Result | Q | WMSA-DMW-4 03/31/2020 Result | Q | WMSA-DMW-5 03/16/2020 Result | Q | WMSA-DMW-6 03/09/2020 Result | Q | WMSA-DMW-7 03/03/2020 Result | Q | WMSA-DMW-8S 03/04/2020 Result | Q | WMSA-DMW-8D 03/04/2020 Result | Q | WMSA-DMW-9 03/26/2020 Result | Q | WMSA-DMW-10 03/03/2020 Result | Q | WMSA-DMW-11A 03/04/2020 Result | Q | BKGD-2 03/26/2020 Result | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Metals, Dissolved (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | 5.6 | | 5.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 4.7 | J | 5.8 | | 5.8 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | <0.12 | | 0.14 | J | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | 0.31 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Hexavalent Chromium | E218.6 | <0.30 | | <0.30 | | 4.1 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 0.48 | J | <0.30 | | <0.30 | | <0.30 | | 1.5 | | <0.30 | |
| Copper | E200.8 | <4.0 | | <4.0 | | 4.2 | J | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | |
| Mercury (ngL) | E1631 | 0.259 | J | <2.00 | | 1.00 | | <2.00 | | 0.516 | | 0.442 | J | <2.00 | | 10.8 | | <0.200 | | <0.200 | | 0.409 | J | 3.92 | | <0.200 | | 0.552 | | 1.11 | |
| Nickel | E200.8 | 17 | | 3.7 | J | 19 | | 3.5 | J | <3.0 | | 3.5 | J | 4.0 | J | 5.2 | | <3.0 | | 4.1 | J | <3.0 | | 4.8 | J | <3.0 | | 3.6 | J | <3.0 | |
| Selenium | E200.8 | <0.60 | | <0.60 | | 8.1 | | 8.4 | | <0.60 | | 15 | | <0.60 | | <0.60 | | <0.60 | | 5.3 | | 0.62 | J | 1.1 | J | <0.60 | | 34 | | <0.60 | |
| Silver | E200.8 | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | 69 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | |
| **Metals, Total (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | 7.5 | | 5.0 | J | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 5.1 | | 5.6 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | 0.55 | J | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | 0.19 | J | 0.13 | J | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | | 0.34 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | 20 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | 13 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Hexavalent Chromium | E218.6 | <0.30 | | <0.30 | | 4.0 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 0.37 | J | <0.30 | | 0.51 | J | <0.30 | | <0.30 | | <0.30 | | 1.4 | | <0.30 | |
| Copper | E200.8 | <4.0 | | <4.0 | | 11 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 7.2 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 11 | |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | |
| Mercury (ng/L) | E1631 | 0.404 | J | 0.257 | J | 10.9 | | 2.82 | | 1.35 | | 0.791 | | 0.602 | | 33.4 | | <0.200 | | <0.200 | | 0.788 | | 13.8 | | 2.05 | | 1.41 | | 2.36 | |
| Nickel | E200.8 | 20 | | 4.8 | J | 37 | | 8.7 | | <3.0 | | <3.0 | | 3.3 | J | 13 | | <3.0 | | 3.7 | J | <3.0 | | 6.9 | | <3.0 | | 9.3 | | <3.0 | |
| Selenium | E200.8 | <0.60 | | <0.60 | | 7.6 | | 7.5 | | <0.60 | | 12 | | <0.60 | | 0.68 | J | <0.60 | | 4.7 | | <0.60 | | 1.3 | J | <0.60 | | 33 | | <0.60 | |
| Silver | E200.8 | <0.10 | | <0.10 | | 0.22 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | 0.28 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | 98 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | | <40 | |
| **VOCs (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 624/624.1 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 0.48 | |
| **SVOCs (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diethyl Phthalate | 625/625.1 | <0.30 | | <0.30 | | 0.31 | J | 0.48 | J | 0.47 | J | <0.30 | | 0.60 | J | 0.34 | J | <0.30 | | 0.39 | J | 0.42 | J | <0.30 | | 0.40 | J | 0.38 | J | <0.30 | |
| Di-n-Butyl Phthalate | 625/625.1 | 2.0 | J | 2.2 | J | 1.9 | J | 4.6 | J | 4.3 | J | 1.2 | J | 4.8 | J | 1.3 | J | 5.1 | J | 5.9 | J | 4.3 | J | 1.4 | J | 4.0 | J | 5.0 | J | 3.1 | J |
| Phenol | 625/625.1 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| **TPH (ug/L)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TPH as Gasoline | SW8260B | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | |
| TPH-Diesel | SW8015B | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | | <50 | |
| TPH-Heavy Oils | SW8015B | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | | <100 | |
| **Cyanide (mg/L)** | | <0.0020 | | <0.0020 | | 0.0036 | | 0.0021 | J | <0.0020 | | <0.0020 | | 0.0039 | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | |

Notes:
< = Analyte NOT DETECTED at or above the laboratory method detection limit
J = estimated value below the laboratory reporting limit.
gray shading = leachate monitoring well

| Sample Location | Date | Temp. C | pH | EC (uS) | DO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|
| EMSA-DMW-1D | 3/17/2020 | 18.20 | 8.28 | 722 | 0.12 | 47.2 | -62.2 |
| EMSA-DMW-1S | 3/17/2020 | 17.30 | 6.88 | 1431 | 0.22 | 1.34 | 32.1 |
| EMSA-DMW-2D | 3/19/2020 | 19.00 | 7.96 | 2070 | 0.19 | 1.20 | -108.2 |
| EMSA-DMW-2S | 3/19/2020 | 18.80 | 7.06 | 4030 | 1.02 | 5.57 | -22.6 |
| EMSA-DMW-3 | 3/24/2020 | 18.00 | 6.74 | 5668 | 0.24 | 31.40 | 180.0 |
| EMSA-DMW-4D | 3/24/2020 | 16.60 | 7.25 | 754 | 1.08 | 1.38 | 49.2 |
| EMSA-DMW-4S | 3/24/2020 | 16.20 | 8.33 | 609 | 0.24 | 1.82 | 52.1 |
| EMSA-DMW-5 | 3/24/2020 | 18.20 | 7.89 | 1427 | 0.97 | 1.48 | -37.1 |
| EMSA-DMW-6 | 3/9/2020 | 17.90 | 7.20 | 1101 | 1.05 | 1.36 | -113.3 |
| EMSA-DMW-7 | 3/31/2020 | 19.80 | 12.16 | 6599 | 0.00 | 1.4 | -513.1 |
| EMSA-DMW-8 | 3/19/2020 | 20.10 | 8.25 | 4437 | 2.25 | 1.95 | -21.8 |
| EMSA-DMW-9 | 3/17/2020 | 18.70 | 6.60 | 2879 | 6.16 | 1.86 | -32.4 |
| EMSA-SW-A | 3/18/2020 | 14.50 | 7.98 | 792 | 6.91 | 3.56 | 229.6 |
| EMSA-SW-B | 3/18/2020 | 13.80 | 7.99 | 944 | 6.67 | 1.93 | 244.6 |
| EMSA-SW-C | 3/18/2020 | 13.70 | 8.14 | 1037 | 9.57 | 1.37 | 90.9 |
| EMSA-SW-D | 3/18/2020 | 13.40 | 8.13 | 1064 | 9.00 | 1.10 | 149.2 |
| BKGD-2 | 3/26/2020 | 17.30 | 8.39 | 2642 | 0.18 | 7.01 | -173.2 |
| WMSA-DMW-1D | 3/23/2020 | 13.90 | 7.15 | 1072 | 0.73 | 1.00 | -3.8 |
| WMSA-DMW-1S | 3/23/2020 | 14.90 | 6.83 | 1003 | 0.45 | 0.80 | 116.1 |
| WMSA-DMW-2 | 3/9/2020 | 18.80 | 6.87 | 2428 | 1.08 | 601 | 176.1 |
| WMSA-DMW-3D | 3/3/2020 | 16.20 | 9.52 | 410 | 0.24 | 5.24 | -25.4 |
| WMSA-DMW-3S | 3/3/2020 | 14.90 | 6.85 | 1876 | 0.21 | 2.48 | 154.2 |
| WMSA-DMW-4 | 3/31/2020 | 17.40 | 7.17 | 1880 | 2.60 | 1.90 | 118.6 |
| WMSA-DMW-5 | 3/16/2020 | 16.20 | 7.27 | 852 | 1.15 | 1.30 | -41.6 |
| WMSA-DMW-6 | 3/9/2020 | 16.90 | 7.08 | 1951 | 4.36 | 2.40 | 221.2 |
| WMSA-DMW-7 | 3/3/2020 | 17.30 | 7.85 | 515 | 3.17 | 1.40 | -143.7 |
| WMSA-DMW-8D | 3/4/2020 | 13.90 | 9.36 | 416 | 0.32 | 1.40 | 115.2 |
| WMSA-DMW-8S | 3/4/2020 | 12.80 | 6.98 | 1119 | 4.61 | 1.14 | 180.9 |
| WMSA-DMW-9 | 3/26/2020 | 16.30 | 6.90 | 1831 | 0.17 | 12.00 | 141.3 |
| WMSA-DMW-10 | 3/3/2020 | 17.10 | 7.80 | 550 | 1.67 | 1.37 | -141.9 |
| WMSA-DMW-11A | 3/4/2020 | 19.00 | 7.25 | 1853 | 1.32 | 6.81 | 192.4 |
| WMSA-SW-A | 3/4/2020 | 11.00 | 8.11 | 549 | 8.11 | 0.98 | 134.1 |
| WMSA-SW-B | 3/4/2020 | 10.80 | 8.32 | 542 | 8.16 | 1.30 | 101.9 |
| WMSA-SW-C | 3/4/2020 | 12.30 | 7.98 | 1335 | 9.09 | 1.51 | 174.7 |
| WMSA-SW-D | 3/4/2020 | 15.00 | 8.35 | 730 | 7.47 | 0.87 | 182.9 |
| WMSA-SW-E | 3/4/2020 | Dry | - | - | - | - | - |
| GH-Seep-A | 5/4/2020 | Dry | - | - | - | - | - |
| GH-Seep-B | 5/4/2020 | Dry | - | - | - | - | - |
| WC-Seep-A | 5/5/2020 | 14.15 | 8.23 | 833 | 7.30 | 4.91 | 188.2 |
| WC-Seep-B | 5/5/2020 | Dry | - | - | - | - | - |
| WC-Seep-C | 5/5/2020 | Dry | - | - | - | - | - |
| WC-Seep-D | 5/5/2020 | Dry | - | - | - | - | - |

# Appendix D: Summary of Surface Water Analytical Results
## Q1 2020
## Lehigh Permanente Site



| Analyte | Method | EMSA-SW-A 03/18/2020 Result | Q | EMSA-SW-B 03/18/2020 Result | Q | EMSA-SW-C 03/18/2020 Result | Q | EMSA-SW-D 03/18/2020 Result | Q | WMSA-SW-A 03/04/2020 Result | Q | WMSA-SW-B 03/04/2020 Result | Q | WMSA-SW-C 03/04/2020 Result | Q | WMSA-SW-D 03/04/2020 Result | Q | WC SEEP A 05/05/2020 Result | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dissovled Metal (ug/L)** | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | < 2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | <4.0 | | 4.2 | J | < 4.0 | | <4.0 | | 4.5 | J | 4.1 | J | <4.0 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | < 0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | <0.12 | | <0.12 | | < 0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | < 5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Copper | E200.8 | 0.76 | J | 1.2 | | 1.0 | | 1.2 | | < 4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | < 0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | |
| Nickel | E200.8 | 5.3 | | 7.7 | | 8.5 | | 8.8 | | < 3.0 | | <3.0 | | 4.6 | J | 4.5 | J | <3.0 | |
| Selenium | E200.8 | 5.2 | | 7.1 | | 6.3 | | 6.8 | | 0.75 | J | 0.85 | J | 6.8 | | 6.2 | | 0.95 | J |
| Silver | E200.8 | <0.10 | | <0.10 | | <0.10 | | <0.10 | | < 0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | < 0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | <40 | | <40 | | < 40 | | <40 | | <40 | | <40 | | <40 | |
| Hexavalent Chromium | E218.6 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | 0.57 | J | 0.53 | J | 0.50 | J | 0.50 | J | 0.39 | J |
| Mercury (ng/L) | E1631 | 0.576 | | 0.273 | J | 0.952 | | 0.477 | J | < 0.200 | | <0.200 | | 0.369 | J | 0.517 | | 0.381 | J |
| **Total Metal (ug/L)** | | | | | | | | | | | | | | | | | | | |
| Antimony | E200.8 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | < 2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Arsenic | E200.8 | <4.0 | | <4.0 | | <4.0 | | <4.0 | | < 4.0 | | <4.0 | | <4.0 | | <4.0 | | <4.0 | |
| Beryllium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | < 0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Cadmium | E200.8 | <0.12 | | <0.12 | | <0.12 | | <0.12 | | < 0.12 | | <0.12 | | <0.12 | | <0.12 | | <0.12 | |
| Chromium | E200.8 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | < 5.0 | | <5.0 | | <5.0 | | <5.0 | | 5.1 | |
| Copper | E200.8 | 0.67 | J | 1.1 | | 0.94 | J | 0.99 | J | < 4.0 | | < 4.0 | | 6.2 | | < 4.0 | | 4.8 | J |
| Lead | E200.8 | <0.60 | | <0.60 | | <0.60 | | <0.60 | | < 0.60 | | <0.60 | | <0.60 | | <0.60 | | <0.60 | |
| Nickel | E1631 | 5.2 | | 7.9 | | 9.1 | | 8.9 | | < 3.0 | | <3.0 | | 5.4 | | 5.3 | | 6.4 | |
| Selenium | E200.8 | 4.4 | | 7.0 | | 5.7 | | 6.6 | | < 0.60 | | <0.60 | | 7.0 | | 6.5 | | 1.0 | J |
| Silver | E200.8 | 0.13 | J | <0.10 | | <0.10 | | <0.10 | | < 0.10 | | <0.10 | | <0.10 | | <0.10 | | 0.12 | J |
| Thallium | E200.8 | <0.50 | | <0.50 | | <0.50 | | <0.50 | | < 0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Zinc | E200.8 | <40 | | <40 | | <40 | | <40 | | < 40 | | <40 | | <40 | | <40 | | <40 | |
| Hexavalent Chromium | E218.6 | <4.0 | | 9.2 | | <4.0 | | <4.0 | | 0.47 | J | 0.58 | J | 0.45 | J | 0.48 | J | 0.43 | J |
| Mercury (ng/L) | E1631 | 10.6 | | 0.526 | | 3.09 | J | 0.856 | | <0.200 | | <0.200 | | 0.366 | J | 0.417 | J | 6.25 | |
| **VOCs (ug/L)** | | | | | | | | | | ND | | | | | | | | | |
| Benzene | 624/624.1 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | | | <0.30 | | <0.30 | | <0.30 | | NA | |
| **SVOCs (ug/L)** | | | | | | | | | | 0.49 | J | | | | | | | | |
| Diethyl Phthalate | 625/525.1 | <0.30 | | <0.30 | | <0.30 | | <0.30 | | 5.8 | J | <0.30 | | 0.43 | J | 0.48 | J | NA | |
| Di-n-Butyl Phthalate | 625/525.1 | 1.5 | J | 1.2 | J | 1.3 | J | 1.2 | J | ND | | 6.5 | J | 5.1 | J | 6.0 | J | NA | |
| **TPH (ug/L)** | SW8260B | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | NA | |
| **PCBs & Pesticides (ug/L)** | | ND | | ND | | ND | | ND | | <0.0020 | U | ND | | ND | | ND | | NA | |
| **Cyanide (mg/L)** | | <0.0020 | | <0.0020 | | <0.0020 | | <0.0020 | | | | 0.0023 | J | <0.0020 | | <0.0020 | | NA | |

Notes:

< = Analyte NOT DETECTED at or above the laboratory method detection limit

J = estimated value below the laboratory reporting limit.

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

24 March 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C0441

Enclosed are the results of analyses for samples received by the laboratory on 03/03/20 21:47. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 03/24/20 13:03 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego Service Center: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-3s | 20C0441-01 | Water | 03/03/20 14:30 | 03/03/20 21:47 |
| WMSA-DMW-3d | 20C0441-02 | Water | 03/03/20 13:30 | 03/03/20 21:47 |
| WMSA-DMW-7 | 20C0441-03 | Water | 03/03/20 11:35 | 03/03/20 21:47 |
| WMSA-DMW-10 | 20C0441-04 | Water | 03/03/20 12:40 | 03/03/20 21:47 |
| Blank - Ground Water | 20C0441-05 | Water | 03/03/20 00:00 | 03/03/20 21:47 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03295 | 03/04/20 22:54 | 03/04/20 22:54 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03295 | 03/04/20 23:12 | 03/04/20 23:12 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03295 | 03/04/20 23:31 | 03/04/20 23:31 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03295 | 03/04/20 23:50 | 03/04/20 23:50 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **5.0** | **4.0** | **5.0** | **ug/L** | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium** | **0.13** | **0.12** | **0.20** | **ug/L** | 2 | AC03381 | 03/10/20 09:15 | 03/12/20 17:19 | EPA 200.8 | MB | 1551 | R-01, J |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **8.7** | **3.0** | **5.0** | **ug/L** | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **7.5** | **0.60** | **4.0** | **ug/L** | 2 | AC03381 | 03/10/20 09:15 | 03/12/20 17:19 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/12/20 17:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/12/20 17:02 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| **Beryllium** | **0.55** | **0.50** | **1.0** | **ug/L** | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, J |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 01:58 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 01:58 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 01:58 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:08 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:06 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:06 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:06 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:16 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03381 | 03/10/20 09:15 | 03/14/20 02:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03381 | 03/10/20 09:15 | 03/13/20 21:24 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03332 | 03/05/20 13:36 | 03/05/20 13:36 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03332 | 03/05/20 15:09 | 03/05/20 15:09 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03332 | 03/05/20 15:28 | 03/05/20 15:28 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03332 | 03/05/20 15:47 | 03/05/20 15:47 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **5.0** | **4.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/12/20 13:38 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium, dissolved** | **0.14** | **0.12** | **0.20** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 18:22 | EPA 200.8 | MB | 1551 | R-01, J |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **3.5** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/12/20 13:38 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **8.4** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/12/20 14:03 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 18:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 16:48 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 06:59 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:30 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:30 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:30 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:48 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 07:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 18:56 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.7** | **4.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 07:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 22:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:05 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| **Mercury** | **2.82** | **0.200** | **0.500** | **ng/l** | 1 | AC03359 | 03/05/20 18:00 | 03/06/20 16:07 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| **Mercury** | **1.35** | **0.200** | **0.500** | **ng/l** | 1 | AC03359 | 03/05/20 18:00 | 03/06/20 16:16 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | 1 | AC03359 | 03/05/20 18:00 | 03/06/20 16:24 | EPA 1631E | AJC | 2728 | U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| **Mercury** | **2.05** | **0.200** | **0.500** | **ng/l** | 1 | AC03359 | 03/05/20 18:00 | 03/06/20 16:32 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AC03896 | 03/13/20 19:00 | 03/16/20 14:31 | EPA 1631E | AJC | 2728 | R-01, U |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.516** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 14:39 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 14:47 | EPA 1631E | AJC | 2728 | U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 14:55 | EPA 1631E | AJC | 2728 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| **Cyanide (total)** | **0.0021** | **0.0020** | **0.0030** | **mg/L** | 1 | AC03820 | 03/13/20 09:00 | 03/13/20 13:48 | 10-204-00-1X | EV | 1551 | J |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC03820 | 03/13/20 09:00 | 03/13/20 13:50 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC03820 | 03/13/20 09:00 | 03/13/20 13:51 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC03820 | 03/13/20 09:00 | 03/13/20 13:53 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 06:06 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 06:06 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *117 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 06:06* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 06:40 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 06:40 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *119 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 06:40* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 07:15 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 07:15 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *99.4 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 07:15* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 07:50 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 07:50 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *97.3 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 07:50* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 09:09 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *102 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 09:09* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 09:43 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *101 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 09:43* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 10:17 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *101 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 10:17* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 10:52 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.4 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 10:52* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03320 | 03/05/20 08:00 | 03/05/20 23:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.7 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.4 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03320 | 03/05/20 08:00 | 03/06/20 00:03 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.7 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *94.5 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 07:34 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *101 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.4 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 08:08 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *92.4 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.3 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C0441-05) Water Sampled: 03/03/20 00:00 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 08:42 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *104 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.8 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03320 | 03/05/20 08:00 | 03/05/20 23:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.7 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.4 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/05/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03320 | 03/05/20 08:00 | 03/06/20 00:03 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.7 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *94.5 %* | *70-130* | | | *AC03320* | *03/05/20 08:00* | *03/06/20 00:03* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 07:34 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *101 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.4 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 07:34* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 08:08 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *92.4 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.3 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:08* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C0441-05) Water Sampled: 03/03/20 00:00 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 08:42 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *104 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.8 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 08:42* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:09 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:09* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *112 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:09* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:09* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 09:43 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *116 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:43* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *113 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:43* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 09:43* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:17 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:17* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:17* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *113 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:17* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 10:52 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:52* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *110 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:52* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *112 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 10:52* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C0441-05) Water Sampled: 03/03/20 00:00 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 11:26 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 11:26* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 11:26* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 11:26* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water** | **Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.48** | **0.30** | **2.0** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.6** | **0.90** | **10** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 03:56 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *63.0 %* | *27-119* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *3.65 %* | *7-85* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *74.9 %* | *15-314* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *75.4 %* | *36-141* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *2.12 %* | *1-65* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *45.0 %* | *4-168* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 03:56* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.47** | **0.30** | **2.0** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.3** | **0.90** | **10** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 04:32 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *73.0 %* | *27-119* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *51.6 %* | *7-85* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *88.0 %* | *15-314* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *88.0 %* | *36-141* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *34.3 %* | *1-65* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *112 %* | *4-168* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 04:32* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **5.1** | **0.90** | **10** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:08 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *69.0 %* | *27-119* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *36.0 %* | *7-85* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *82.5 %* | *15-314* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *69.3 %* | *36-141* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *20.8 %* | *1-65* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *90.4 %* | *4-168* | | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:08* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.40** | **0.30** | **2.0** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.0** | **0.90** | **10** | **ug/L** | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03292 | 03/05/20 08:00 | 03/06/20 05:45 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | | *66.4 %* | *27-119* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | | *41.1 %* | *7-85* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | | *77.7 %* | *15-314* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | | *90.6 %* | *36-141* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | | *28.9 %* | *1-65* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | | *104 %* | *4-168* | | *AC03292* | *03/05/20 08:00* | *03/06/20 05:45* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 17:10 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 17:10 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *90.2 %* | *27-119* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:10* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *92.7 %* | *15-314* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:10* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *78.5 %* | *36-141* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:10* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 17:43 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 17:43 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *86.7 %* | *27-119* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:43* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *89.7 %* | *15-314* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:43* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *95.2 %* | *36-141* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 17:43* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 18:17 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 18:17 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *68.9 %* | *27-119* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *71.3 %* | *15-314* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *54.6 %* | *36-141* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:17* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 18:50 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03310 | 03/05/20 06:58 | 03/13/20 18:50 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *69.2 %* | *27-119* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:50* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *72.0 %* | *15-314* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:50* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *60.6 %* | *36-141* | | | *AC03310* | *03/05/20 06:58* | *03/13/20 18:50* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3s (20C0441-01) Water Sampled: 03/03/20 14:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 20:29 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *68.0 %* | *24-119* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 20:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *81.0 %* | *15-314* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 20:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *80.4 %* | *37-139* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 20:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:06 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-3d (20C0441-02) Water Sampled: 03/03/20 13:30 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *74.7 %* | *24-119* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *101 %* | *15-314* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *101 %* | *37-139* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-7 (20C0441-03) Water Sampled: 03/03/20 11:35 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 21:43 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *76.9 %* | *24-119* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:43* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *94.8 %* | *15-314* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:43* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *101 %* | *37-139* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 21:43* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-10 (20C0441-04) Water Sampled: 03/03/20 12:40 Received: 03/03/20 21:47** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC03513 | 03/05/20 08:00 | 03/10/20 22:21 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *67.6 %* | *24-119* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 22:21* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *82.5 %* | *15-314* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 22:21* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *106 %* | *37-139* | | | *AC03513* | *03/05/20 08:00* | *03/10/20 22:21* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03295 - General Prep** | | | | | | | | | | | |
| **Blank (AC03295-BLK1)** | | | | | Prepared & Analyzed: 03/04/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03295-BS1)** | | | | | Prepared & Analyzed: 03/04/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AC03295-DUP1)** | | **Source: 20B3012-01** | | | Prepared & Analyzed: 03/04/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC03295-MS1)** | | **Source: 20B3012-01** | | | Prepared & Analyzed: 03/04/20 | | | | | | |
| Chromium, hexavalent | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | ND | 104 | 90-110 | | | |
| **Matrix Spike Dup (AC03295-MSD1)** | | **Source: 20B3012-01** | | | Prepared & Analyzed: 03/04/20 | | | | | | |
| Chromium, hexavalent | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | ND | 104 | 90-110 | 0.164 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03381 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC03381-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03381-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | 20.1 | 0.20 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Arsenic | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Beryllium | 20.8 | 0.050 | 0.10 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Cadmium | 20.6 | 0.060 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Chromium | 21.0 | 0.50 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Copper | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Lead | 20.6 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Selenium | 21.1 | 0.30 | 2.0 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Silver | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Thallium | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc | 105 | 4.0 | 5.0 | ug/L | 100 | | 105 | 85-115 | | | |
| **Duplicate (AC03381-DUP1)** | | **Source: 20C0047-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.8 | 0.40 | 0.50 | ug/L | | 7.63 | | | 34.4 | 20 | QD-03 |
| Lead | 0.745 | 0.24 | 1.0 | ug/L | | 0.747 | | | 0.320 | 20 | R-01, J |
| Nickel | 1.84 | 1.2 | 2.0 | ug/L | | 1.82 | | | 1.14 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03381 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC03381-DUP1)** | | **Source: 20C0047-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Silver | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 72.9 | 16 | 20 | ug/L | | 71.7 | | | 1.74 | 20 | |
| **Matrix Spike (AC03381-MS1)** | | **Source: 20C0047-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | 19.5 | 0.80 | 2.0 | ug/L | 20.0 | ND | 97.5 | 70-130 | | | |
| Arsenic | 21.1 | 1.6 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Beryllium | 20.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium | 20.2 | 0.24 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Chromium | 20.8 | 2.0 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Copper | 26.3 | 1.6 | 2.0 | ug/L | 20.0 | 7.63 | 93.1 | 70-130 | | | |
| Lead | 20.5 | 0.24 | 1.0 | ug/L | 20.0 | 0.747 | 98.8 | 70-130 | | | |
| Nickel | 21.7 | 1.2 | 2.0 | ug/L | 20.0 | 1.82 | 99.2 | 70-130 | | | |
| Selenium | 20.6 | 1.2 | 8.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Silver | 19.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 99.5 | 70-130 | | | |
| Thallium | 19.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Zinc | 171 | 16 | 20 | ug/L | 100 | 71.7 | 99.3 | 70-130 | | | |
| **Matrix Spike (AC03381-MS2)** | | **Source: 20C0692-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | 19.7 | 0.80 | 2.0 | ug/L | 20.0 | ND | 98.5 | 70-130 | | | |
| Arsenic | 20.9 | 1.6 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Beryllium | 21.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Cadmium | 20.4 | 0.24 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Chromium | 20.8 | 2.0 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Copper | 202 | 1.6 | 2.0 | ug/L | 20.0 | 179 | 114 | 70-130 | | | |
| Lead | 51.1 | 0.24 | 1.0 | ug/L | 20.0 | 30.5 | 103 | 70-130 | | | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 1.66 | 104 | 70-130 | | | |
| Selenium | 20.6 | 1.2 | 8.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Zinc | 237 | 16 | 20 | ug/L | 100 | 131 | 106 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03381 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03381-MSD1)** | | **Source: 20C0047-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Antimony | 20.0 | 0.80 | 2.0 | ug/L | 20.0 | ND | 100 | 70-130 | 2.57 | 20 | |
| Arsenic | 21.9 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.59 | 20 | |
| Beryllium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | 2.57 | 20 | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | 2.59 | 20 | |
| Chromium | 21.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | 2.70 | 20 | |
| Copper | 27.1 | 1.6 | 2.0 | ug/L | 20.0 | 7.63 | 97.5 | 70-130 | 3.25 | 20 | |
| Lead | 21.2 | 0.24 | 1.0 | ug/L | 20.0 | 0.747 | 102 | 70-130 | 3.45 | 20 | |
| Nickel | 22.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.82 | 102 | 70-130 | 2.91 | 20 | |
| Selenium | 20.7 | 1.2 | 8.0 | ug/L | 20.0 | ND | 103 | 70-130 | 0.434 | 20 | |
| Silver | 20.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | 1.22 | 20 | |
| Thallium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 3.53 | 20 | |
| Zinc | 176 | 16 | 20 | ug/L | 100 | 71.7 | 104 | 70-130 | 2.66 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03332 - General Prep** | | | | | | | | | | | |
| **Blank (AC03332-BLK1)** | | | | | Prepared & Analyzed: 03/05/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03332-BS1)** | | | | | Prepared & Analyzed: 03/05/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AC03332-DUP1)** | | **Source: 20C0441-01** | | | Prepared & Analyzed: 03/05/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC03332-MS1)** | | **Source: 20C0441-01** | | | Prepared & Analyzed: 03/05/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.64 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.4 | 90-110 | | | |
| **Matrix Spike Dup (AC03332-MSD1)** | | **Source: 20C0441-01** | | | Prepared & Analyzed: 03/05/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.63 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.3 | 90-110 | 0.145 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC03427-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03427-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.4 | 0.20 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Arsenic, dissolved | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 85-115 | | | |
| Beryllium, dissolved | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Cadmium, dissolved | 21.3 | 0.060 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Chromium, dissolved | 21.1 | 0.50 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Copper, dissolved | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead, dissolved | 20.8 | 0.060 | 0.25 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Nickel, dissolved | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Selenium, dissolved | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 101 | 4.0 | 5.0 | ug/L | 100 | | 101 | 85-115 | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.89 | 4.0 | 5.0 | ug/L | | 5.04 | | | 3.00 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | 0.122 | 0.12 | 0.20 | ug/L | | 0.136 | | | 11.5 | 20 | R-01, J |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 3.92 | 3.0 | 5.0 | ug/L | | 3.53 | | | 10.5 | 20 | R-01, J |
| Selenium, dissolved | 8.38 | 0.60 | 4.0 | ug/L | | 8.38 | | | 0.0164 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC03427-MRL1)** | | | | | Prepared: 03/09/20 Analyzed: 03/12/20 | | | | | | |
| Beryllium, dissolved | 0.144 | 0.050 | 0.10 | ug/L | 0.160 | | 90.2 | 0-200 | | | |
| **Matrix Spike (AC03427-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 113 | 70-130 | | | |
| Beryllium, dissolved | 19.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Chromium, dissolved | 25.6 | 5.0 | 5.0 | ug/L | 20.0 | ND | 128 | 70-130 | | | |
| Copper, dissolved | 21.5 | 4.0 | 5.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Lead, dissolved | 20.4 | 0.60 | 2.5 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Nickel, dissolved | 29.0 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 127 | 70-130 | | | |
| Selenium, dissolved | 29.3 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 105 | 70-130 | | | |
| Silver, dissolved | 21.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Thallium, dissolved | 20.7 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike (AC03427-MS2)** | | **Source: 20B2972-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Arsenic, dissolved | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | 0.650 | 107 | 70-130 | | | |
| Beryllium, dissolved | 19.7 | 0.050 | 0.10 | ug/L | 20.0 | 0.346 | 96.6 | 70-130 | | | |
| Cadmium, dissolved | 21.1 | 0.060 | 0.10 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Chromium, dissolved | 21.2 | 0.50 | 0.50 | ug/L | 20.0 | 0.864 | 102 | 70-130 | | | |
| Copper, dissolved | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | 2.51 | 101 | 70-130 | | | |
| Lead, dissolved | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | 0.159 | 101 | 70-130 | | | |
| Nickel, dissolved | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | 2.02 | 99.3 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 102 | 4.0 | 5.0 | ug/L | 100 | 6.62 | 95.8 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03427-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | 0.0300 | 20 | |
| Arsenic, dissolved | 26.8 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 109 | 70-130 | 3.25 | 20 | |
| Beryllium, dissolved | 19.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.8 | 70-130 | 2.19 | 20 | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | 0.158 | 20 | |
| Chromium, dissolved | 25.5 | 5.0 | 5.0 | ug/L | 20.0 | ND | 127 | 70-130 | 0.285 | 20 | |
| Copper, dissolved | 21.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 1.42 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.02 | 20 | |
| Nickel, dissolved | 29.4 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 129 | 70-130 | 1.36 | 20 | |
| Selenium, dissolved | 28.5 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 101 | 70-130 | 2.82 | 20 | |
| Silver, dissolved | 20.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | 4.32 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 1.27 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.244 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03359 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC03359-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AC03359-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 4.85 | 0.200 | 0.500 | ng/l | 5.00 | | 97.0 | 77-123 | | | |
| **Matrix Spike (AC03359-MS1)** | | **Source: 20B2629-01** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.888 | 93.9 | 71-125 | | | |
| **Matrix Spike (AC03359-MS2)** | | **Source: 20C0462-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 25.7 | 0.200 | 0.500 | ng/l | 25.0 | 1.68 | 96.2 | 71-125 | | | |
| **Matrix Spike Dup (AC03359-MSD1)** | | **Source: 20B2629-01** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 24.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.888 | 92.4 | 71-125 | 1.49 | 24 | |
| **Matrix Spike Dup (AC03359-MSD2)** | | **Source: 20C0462-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.68 | 95.0 | 71-125 | 1.17 | 24 | |
| **Reference (AC03359-SRM1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Mercury | 46.4 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03896 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC03896-BLK1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AC03896-BS1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 4.70 | 0.200 | 0.500 | ng/l | 5.00 | | 94.0 | 77-123 | | | |
| **Matrix Spike (AC03896-MS1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.6 | 71-125 | | | |
| **Matrix Spike (AC03896-MS2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.5 | 71-125 | | | |
| **Matrix Spike Dup (AC03896-MSD1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.7 | 71-125 | 0.0821 | 24 | |
| **Matrix Spike Dup (AC03896-MSD2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.7 | 71-125 | 0.200 | 24 | |
| **Reference (AC03896-SRM1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 48.2 | 0.200 | 0.500 | ng/l | 50.0 | | 96.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03820 - General Preparation** | | | | | | | | | | | |
| **Blank (AC03820-BLK1)** | | | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC03820-BS1)** | | | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | 0.202 | 0.0020 | 0.0030 | mg/L | 0.200 | | 101 | 85-115 | | | |
| **Duplicate (AC03820-DUP1)** | | **Source: 20C0672-07** | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | 0.00306 | | | 200 | 25 | U |
| **Matrix Spike (AC03820-MS1)** | | **Source: 20C0672-07** | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | 0.221 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00306 | 109 | 85-115 | | | |
| **Matrix Spike (AC03820-MS2)** | | **Source: 20C1112-01** | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | 0.203 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 101 | 85-115 | | | |
| **Matrix Spike Dup (AC03820-MSD1)** | | **Source: 20C0672-07** | | | Prepared & Analyzed: 03/13/20 | | | | | | |
| Cyanide (total) | 0.201 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00306 | 99.0 | 85-115 | 9.39 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03488 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC03488-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *59.6* | | | *ug/L* | *65.6* | | *90.9* | *39-120* | | | |
| **LCS (AC03488-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1580 | 50 | 250 | ug/L | 2010 | | 78.7 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *54.4* | | | *ug/L* | *65.6* | | *82.9* | *39-120* | | | |
| **LCS (AC03488-BS2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 1860 | 100 | 250 | ug/L | 2080 | | 89.2 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *74.0* | | | *ug/L* | *65.6* | | *113* | *39-120* | | | |
| **LCS Dup (AC03488-BSD1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1450 | 50 | 250 | ug/L | 2010 | | 72.2 | 61-120 | 8.57 | 25 | |
| *Surrogate: Tetratetracontane* | *62.4* | | | *ug/L* | *65.6* | | *95.2* | *39-120* | | | |
| **LCS Dup (AC03488-BSD2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 2100 | 100 | 250 | ug/L | 2080 | | 101 | 71-125 | 12.5 | 25 | |
| *Surrogate: Tetratetracontane* | *74.9* | | | *ug/L* | *65.6* | | *114* | *39-120* | | | |
| **Matrix Spike (AC03488-MS1)** | | **Source: 20C0727-01** | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1670 | 50 | 250 | ug/L | 2010 | ND | 83.1 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *78.7* | | | *ug/L* | *65.6* | | *120* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03619 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03619-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *76-129* | | | |
| **LCS (AC03619-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 180 | 50 | 50 | ug/L | 200 | | 89.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **LCS Dup (AC03619-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 185 | 50 | 50 | ug/L | 200 | | 92.5 | 67-132 | 2.92 | 25 | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *76-129* | | | |
| **Matrix Spike (AC03619-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 211 | 50 | 50 | ug/L | 200 | ND | 106 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.8* | *76-129* | | | |
| **Matrix Spike Dup (AC03619-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 191 | 50 | 50 | ug/L | 200 | ND | 95.5 | 37-156 | 10.1 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03320 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03320-BLK1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.8* | | | *ug/L* | *25.0* | | *95.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.3* | *70-130* | | | |
| **LCS (AC03320-BS1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| Acrolein | 37.0 | 2.0 | 5.0 | ug/L | 50.0 | | 73.9 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC03320-BSD1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| Acrolein | 37.0 | 2.0 | 5.0 | ug/L | 50.0 | | 73.9 | 60-140 | 0.00 | 25 | |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.0* | | | *ug/L* | *25.0* | | *100* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.4* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC03320-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| Acrolein | 33.6 | 2.0 | 5.0 | ug/L | 50.0 | ND | 67.1 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *98.0* | *70-130* | | | |
| **Matrix Spike Dup (AC03320-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| Acrolein | 32.8 | 2.0 | 5.0 | ug/L | 50.0 | ND | 65.5 | 40-160 | 2.38 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.9* | | | *ug/L* | *25.0* | | *95.6* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.3* | | | *ug/L* | *25.0* | | *97.2* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03391 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03391-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC03391-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 31.5 | 2.0 | 5.0 | ug/L | 50.0 | | 63.1 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |
| **LCS Dup (AC03391-BSD1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 31.9 | 2.0 | 5.0 | ug/L | 50.0 | | 63.7 | 60-140 | 1.01 | 25 | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.5* | *70-130* | | | |
| **Matrix Spike (AC03391-MS1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 23.4 | 2.0 | 5.0 | ug/L | 50.0 | ND | 46.9 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *24.6* | | | *ug/L* | *25.0* | | *98.4* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.4* | | | *ug/L* | *25.0* | | *89.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.3* | | | *ug/L* | *25.0* | | *89.1* | *70-130* | | | |
| **Matrix Spike Dup (AC03391-MSD1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 24.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 49.0 | 40-160 | 4.46 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.6* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03320 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03320-BLK1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.8* | | | *ug/L* | *25.0* | | *95.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.3* | *70-130* | | | |
| **LCS (AC03320-BS1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.6 | 0.70 | 1.0 | ug/L | 25.0 | | 107 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC03320-BSD1)** | | | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.6 | 0.70 | 1.0 | ug/L | 25.0 | | 103 | 3-225 | 3.79 | 30 | |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.0* | | | *ug/L* | *25.0* | | *100* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.4* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC03320-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| 2-Chloroethylvinyl ether | 33.5 | 0.70 | 1.0 | ug/L | 25.0 | ND | 134 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *98.0* | *70-130* | | | |
| **Matrix Spike Dup (AC03320-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/04/20 Analyzed: 03/05/20 | | | | | | |
| 2-Chloroethylvinyl ether | 33.2 | 0.70 | 1.0 | ug/L | 25.0 | ND | 133 | 3-305 | 0.931 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.9* | | | *ug/L* | *25.0* | | *95.6* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.3* | | | *ug/L* | *25.0* | | *97.2* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03391 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03391-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC03391-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.6 | 0.70 | 1.0 | ug/L | 25.0 | | 130 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |
| **LCS Dup (AC03391-BSD1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.2 | 0.70 | 1.0 | ug/L | 25.0 | | 129 | 3-225 | 1.11 | 30 | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.5* | *70-130* | | | |
| **Matrix Spike (AC03391-MS1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 37.1 | 0.70 | 1.0 | ug/L | 25.0 | ND | 148 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *24.6* | | | *ug/L* | *25.0* | | *98.4* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.4* | | | *ug/L* | *25.0* | | *89.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.3* | | | *ug/L* | *25.0* | | *89.1* | *70-130* | | | |
| **Matrix Spike Dup (AC03391-MSD1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 129 | 3-305 | 13.8 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.6* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03620-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03620-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 22.2 | 0.40 | 2.0 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Benzene | 20.3 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 65-135 | | | |
| Bromoform | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | | 109 | 70-130 | | | |
| Carbon tetrachloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.7 | 70-130 | | | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | | | |
| Dibromochloromethane | 22.6 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-135 | | | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | | 85.6 | 40-160 | | | |
| Chloroform | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-135 | | | |
| Bromodichloromethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.6 | 65-135 | | | |
| 1,1-Dichloroethane | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.2 | 70-130 | | | |
| 1,2-Dichloroethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.9 | 70-130 | | | |
| 1,1-Dichloroethene | 18.6 | 0.30 | 0.50 | ug/L | 20.0 | | 92.9 | 50-150 | | | |
| 1,2-Dichloropropane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 35-165 | | | |
| cis-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 97.8 | 25-175 | | | |
| trans-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 50-150 | | | |
| Ethylbenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Bromomethane | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 15-185 | | | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 2-205 | | | |
| Methylene chloride | 17.9 | 0.50 | 0.50 | ug/L | 20.0 | | 89.4 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 24.3 | 0.30 | 0.50 | ug/L | 20.0 | | 121 | 60-140 | | | |
| Tetrachloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Toluene | 22.7 | 0.30 | 0.30 | ug/L | 20.0 | | 114 | 70-130 | | | |
| trans-1,2-Dichloroethene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Trichloroethene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Vinyl chloride | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 5-195 | | | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | | | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-130 | | | |
| 1,4-Dichlorobenzene | 19.6 | 0.10 | 0.50 | ug/L | 20.0 | | 98.0 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.8* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC03620-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | | 106 | 60-140 | 4.52 | 25 | |
| Benzene | 19.8 | 0.30 | 0.30 | ug/L | 20.0 | | 99.1 | 65-135 | 2.44 | 25 | |
| Bromoform | 22.3 | 0.30 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.45 | 25 | |
| Carbon tetrachloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 70-130 | 3.31 | 25 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 0.00 | 25 | |
| Dibromochloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 70-135 | 2.88 | 25 | |
| Chloroethane | 15.6 | 0.40 | 0.50 | ug/L | 20.0 | | 78.0 | 40-160 | 9.29 | 25 | |
| Chloroform | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-135 | 4.59 | 25 | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 65-135 | 0.557 | 25 | |
| 1,1-Dichloroethane | 18.3 | 0.30 | 0.50 | ug/L | 20.0 | | 91.4 | 70-130 | 4.08 | 25 | |
| 1,2-Dichloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.3 | 70-130 | 5.13 | 25 | |
| 1,1-Dichloroethene | 17.7 | 0.30 | 0.50 | ug/L | 20.0 | | 88.4 | 50-150 | 4.91 | 25 | |
| 1,2-Dichloropropane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 35-165 | 2.40 | 25 | |
| cis-1,3-Dichloropropene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 25-175 | 11.2 | 25 | |
| trans-1,3-Dichloropropene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 50-150 | 8.66 | 25 | |
| Ethylbenzene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 60-140 | 2.27 | 25 | |
| Bromomethane | 17.2 | 0.40 | 0.50 | ug/L | 20.0 | | 86.0 | 15-185 | 6.09 | 25 | |
| Chloromethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 95.1 | 2-205 | 7.59 | 25 | |
| Methylene chloride | 17.0 | 0.50 | 0.50 | ug/L | 20.0 | | 84.8 | 60-140 | 5.40 | 25 | |
| 1,1,2,2-Tetrachloroethane | 22.6 | 0.30 | 0.50 | ug/L | 20.0 | | 113 | 60-140 | 7.17 | 25 | |
| Tetrachloroethene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 1.97 | 25 | |
| Toluene | 23.0 | 0.30 | 0.30 | ug/L | 20.0 | | 115 | 70-130 | 1.40 | 25 | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | 5.71 | 25 | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 70-130 | 0.151 | 25 | |
| 1,1,2-Trichloroethane | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.69 | 25 | |
| Trichloroethene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.6 | 65-135 | 0.678 | 25 | |
| Vinyl chloride | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.5 | 5-195 | 3.30 | 25 | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | 0.240 | 25 | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-130 | 9.18 | 25 | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 99.8 | 65-135 | 1.82 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03620-MS1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 22.0 | 0.40 | 2.0 | ug/L | 20.0 | ND | 110 | 40-160 | | | |
| Benzene | 21.7 | 0.30 | 0.30 | ug/L | 20.0 | ND | 109 | 37-151 | | | |
| Bromoform | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 45-169 | | | |
| Carbon tetrachloride | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-140 | | | |
| Chlorobenzene | 21.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 37-160 | | | |
| Dibromochloromethane | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 53-149 | | | |
| Chloroethane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 90.1 | 14-230 | | | |
| Chloroform | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 51-138 | | | |
| Bromodichloromethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 35-155 | | | |
| 1,1-Dichloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 59-155 | | | |
| 1,2-Dichloroethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.3 | 49-155 | | | |
| 1,1-Dichloroethene | 20.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 2-234 | | | |
| 1,2-Dichloropropane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 17-183 | | | |
| Ethylbenzene | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 37-162 | | | |
| Bromomethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.2 | 2-242 | | | |
| Chloromethane | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-273 | | | |
| Methylene chloride | 17.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 87.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 46-157 | | | |
| Tetrachloroethene | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 121 | 64-148 | | | |
| Toluene | 24.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 122 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 52-162 | | | |
| 1,1,2-Trichloroethane | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 52-150 | | | |
| Trichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 70-157 | | | |
| Vinyl chloride | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 2-251 | | | |
| 1,2-Dichlorobenzene | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | | | |
| 1,4-Dichlorobenzene | 20.3 | 0.10 | 0.50 | ug/L | 20.0 | ND | 101 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03620-MSD1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | ND | 106 | 40-160 | 3.71 | 60 | |
| Benzene | 20.8 | 0.30 | 0.30 | ug/L | 20.0 | ND | 104 | 37-151 | 4.61 | 61 | |
| Bromoform | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 45-169 | 1.23 | 42 | |
| Carbon tetrachloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 70-140 | 4.29 | 41 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 37-160 | 4.42 | 53 | |
| Dibromochloromethane | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 53-149 | 2.78 | 50 | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 85.6 | 14-230 | 5.18 | 78 | |
| Chloroform | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 51-138 | 3.77 | 54 | |
| Bromodichloromethane | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 100 | 35-155 | 3.54 | 56 | |
| 1,1-Dichloroethane | 19.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 98.7 | 59-155 | 3.04 | 40 | |
| 1,2-Dichloroethane | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 89.1 | 49-155 | 3.53 | 49 | |
| 1,1-Dichloroethene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 2-234 | 2.46 | 32 | |
| 1,2-Dichloropropane | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.6 | 2-210 | 6.46 | 55 | |
| cis-1,3-Dichloropropene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.6 | 2-227 | 6.33 | 58 | |
| trans-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.1 | 17-183 | 8.07 | 86 | |
| Ethylbenzene | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 37-162 | 4.17 | 63 | |
| Bromomethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.4 | 2-242 | 0.217 | 61 | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-273 | 5.92 | 60 | |
| Methylene chloride | 17.3 | 0.50 | 0.50 | ug/L | 20.0 | ND | 86.6 | 2-221 | 1.38 | 28 | |
| 1,1,2,2-Tetrachloroethane | 22.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 114 | 46-157 | 2.64 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 7.26 | 39 | |
| Toluene | 22.9 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 6.42 | 41 | |
| trans-1,2-Dichloroethene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 54-156 | 5.20 | 45 | |
| 1,1,1-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-162 | 5.57 | 36 | |
| 1,1,2-Trichloroethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 52-150 | 3.56 | 45 | |
| Trichloroethene | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.4 | 70-157 | 6.71 | 48 | |
| Vinyl chloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-251 | 1.52 | 66 | |
| 1,2-Dichlorobenzene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 18-190 | 6.09 | 57 | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | 0.225 | 43 | |
| 1,4-Dichlorobenzene | 19.7 | 0.10 | 0.50 | ug/L | 20.0 | ND | 98.6 | 18-190 | 2.75 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03292 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03292-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | 2.65 | 0.60 | 10 | ug/L | | | | | | | J |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 1.89 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | 1.30 | 0.80 | 5.0 | ug/L | | | | | | | J |
| Di-n-octyl phthalate | 1.51 | 0.60 | 10 | ug/L | | | | | | | J |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03292 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03292-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *28.0* | | | *ug/L* | *40.0* | | *70.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *12.4* | | | *ug/L* | *40.0* | | *31.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.3* | | | *ug/L* | *40.0* | | *75.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *34.0* | | | *ug/L* | *40.0* | | *85.0* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *9.61* | | | *ug/L* | *40.0* | | *24.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *18.7* | | | *ug/L* | *40.0* | | *46.7* | *4-168* | | | |
| **LCS (AC03292-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chlorophenol | 27.0 | 0.70 | 5.0 | ug/L | 40.0 | | 67.4 | 36-120 | | | |
| 2,4-Dichlorophenol | 28.0 | 0.70 | 5.0 | ug/L | 40.0 | | 69.9 | 53-122 | | | |
| 2,4-Dimethylphenol | 25.4 | 1.0 | 2.0 | ug/L | 50.0 | | 50.7 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 29.3 | 3.0 | 5.0 | ug/L | 40.0 | | 73.4 | 53-130 | | | |
| 2,4-Dinitrophenol | 15.5 | 5.0 | 5.0 | ug/L | 40.0 | | 38.8 | 10-173 | | | |
| 2-Nitrophenol | 32.0 | 0.90 | 10 | ug/L | 40.0 | | 80.1 | 45-167 | | | |
| 4-Nitrophenol | 16.9 | 3.0 | 10 | ug/L | 40.0 | | 42.2 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 31.3 | 1.0 | 1.0 | ug/L | 40.0 | | 78.3 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 30.4 | 0.60 | 5.0 | ug/L | 40.0 | | 75.9 | 36-102 | | | |
| Pentachlorophenol | 30.4 | 4.0 | 5.0 | ug/L | 40.0 | | 76.1 | 38-152 | | | |
| Phenol | 14.7 | 0.50 | 1.0 | ug/L | 40.0 | | 36.7 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 32.6 | 0.70 | 10 | ug/L | 40.0 | | 81.5 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 31.2 | 0.90 | 5.0 | ug/L | 40.0 | | 78.1 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 31.3 | 0.90 | 1.0 | ug/L | 40.0 | | 78.2 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.7 | 1.0 | 2.0 | ug/L | 40.0 | | 74.2 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 34.5 | 3.0 | 5.0 | ug/L | 40.0 | | 86.2 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 27.3 | 1.0 | 5.0 | ug/L | 40.0 | | 68.2 | 65-120 | | | |
| Butyl benzyl phthalate | 19.6 | 0.60 | 10 | ug/L | 40.0 | | 48.9 | 2-140 | | | |
| 2-Chloronaphthalene | 29.1 | 0.60 | 10 | ug/L | 40.0 | | 72.6 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 29.9 | 0.90 | 5.0 | ug/L | 40.0 | | 74.8 | 38-145 | | | |
| 1,2-Dichlorobenzene | 22.5 | 0.60 | 2.0 | ug/L | 40.0 | | 56.2 | 33-93 | | | |
| 1,3-Dichlorobenzene | 21.2 | 0.60 | 1.0 | ug/L | 40.0 | | 53.0 | 31-92 | | | |
| 1,4-Dichlorobenzene | 21.2 | 0.60 | 1.0 | ug/L | 40.0 | | 53.1 | 32-91 | | | |
| Diethyl phthalate | 24.5 | 0.30 | 2.0 | ug/L | 40.0 | | 61.2 | 2-120 | | | |
| Dimethyl phthalate | 13.5 | 0.80 | 2.0 | ug/L | 40.0 | | 33.7 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03292 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03292-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Di-n-butyl phthalate | 25.7 | 0.90 | 10 | ug/L | 40.0 | | 64.2 | 8-120 | | | |
| 2,4-Dinitrotoluene | 40.0 | 0.80 | 5.0 | ug/L | 40.0 | | 100 | 48-127 | | | |
| 2,6-Dinitrotoluene | 35.4 | 0.80 | 5.0 | ug/L | 40.0 | | 88.6 | 68-137 | | | |
| Di-n-octyl phthalate | 26.4 | 0.60 | 10 | ug/L | 40.0 | | 66.1 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 27.6 | 0.60 | 1.0 | ug/L | 40.0 | | 68.9 | 52-115 | | | |
| Hexachlorobenzene | 29.2 | 0.90 | 1.0 | ug/L | 40.0 | | 73.0 | 8-142 | | | |
| Hexachlorobutadiene | 24.4 | 0.80 | 1.0 | ug/L | 40.0 | | 61.0 | 38-120 | | | |
| Hexachlorocyclopentadiene | 11.6 | 4.0 | 5.0 | ug/L | 40.0 | | 29.0 | 16-93 | | | |
| Hexachloroethane | 31.0 | 0.60 | 1.0 | ug/L | 40.0 | | 77.6 | 55-120 | | | |
| Isophorone | 32.8 | 0.30 | 1.0 | ug/L | 40.0 | | 82.1 | 47-180 | | | |
| Nitrobenzene | 31.2 | 0.90 | 1.0 | ug/L | 40.0 | | 78.0 | 54-158 | | | |
| N-Nitrosodimethylamine | 19.3 | 0.30 | 5.0 | ug/L | 40.0 | | 48.3 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 35.2 | 0.80 | 5.0 | ug/L | 40.0 | | 88.0 | 14-198 | | | |
| N-Nitrosodiphenylamine | 30.2 | 1.0 | 1.0 | ug/L | 40.0 | | 75.4 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 23.2 | 0.60 | 5.0 | ug/L | 40.0 | | 58.0 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *30.4* | | | *ug/L* | *40.0* | | *76.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.3* | | | *ug/L* | *40.0* | | *43.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.0* | | | *ug/L* | *40.0* | | *90.1* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.1* | | | *ug/L* | *40.0* | | *103* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.4* | | | *ug/L* | *40.0* | | *36.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *29.8* | | | *ug/L* | *40.0* | | *74.5* | *4-168* | | | |
| **Matrix Spike (AC03292-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | **QM-05** |
| 2-Chlorophenol | 17.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 43.0 | 23-134 | | | |
| 2,4-Dichlorophenol | 19.8 | 0.70 | 5.0 | ug/L | 40.0 | ND | 49.5 | 39-135 | | | |
| 2,4-Dimethylphenol | 3.88 | 1.0 | 2.0 | ug/L | 50.0 | ND | 7.76 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 30.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 77.2 | 7-181 | | | |
| 2,4-Dinitrophenol | 24.5 | 5.0 | 5.0 | ug/L | 40.0 | ND | 61.2 | 10-191 | | | |
| 2-Nitrophenol | 44.4 | 0.90 | 10 | ug/L | 40.0 | ND | 111 | 29-182 | | | |
| 4-Nitrophenol | 25.0 | 3.0 | 10 | ug/L | 40.0 | ND | 62.5 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 13.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 34.8 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 8.49 | 0.60 | 5.0 | ug/L | 40.0 | ND | 21.2 | 9-124 | | | |
| Pentachlorophenol | 32.8 | 4.0 | 5.0 | ug/L | 40.0 | ND | 82.0 | 14-176 | | | |
| Phenol | 5.87 | 0.50 | 1.0 | ug/L | 40.0 | ND | 14.7 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 28.3 | 0.70 | 10 | ug/L | 40.0 | ND | 70.8 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 32.3 | 0.90 | 5.0 | ug/L | 40.0 | ND | 80.7 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 30.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 75.9 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03292 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03292-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | **QM-05** |
| Bis(2-chloroisopropyl)ether | 29.9 | 1.0 | 2.0 | ug/L | 40.0 | ND | 74.8 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 81.0 | 3.0 | 5.0 | ug/L | 40.0 | ND | 203 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 30.0 | 1.0 | 5.0 | ug/L | 40.0 | ND | 74.9 | 53-127 | | | |
| Butyl benzyl phthalate | 25.1 | 0.60 | 10 | ug/L | 40.0 | ND | 62.7 | 2-152 | | | |
| 2-Chloronaphthalene | 28.0 | 0.60 | 10 | ug/L | 40.0 | ND | 69.9 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 33.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 83.4 | 25-158 | | | |
| 1,4-Dichlorobenzene | 24.7 | 0.60 | 1.0 | ug/L | 40.0 | ND | 61.6 | 3-105 | | | |
| 1,2-Dichlorobenzene | 24.8 | 0.60 | 2.0 | ug/L | 40.0 | ND | 61.9 | 7-104 | | | |
| 1,3-Dichlorobenzene | 23.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 59.6 | 1-106 | | | |
| Diethyl phthalate | 29.7 | 0.30 | 2.0 | ug/L | 40.0 | 0.480 | 73.0 | 2-120 | | | |
| Dimethyl phthalate | 20.5 | 0.80 | 2.0 | ug/L | 40.0 | ND | 51.2 | 2-120 | | | |
| Di-n-butyl phthalate | 31.1 | 0.90 | 10 | ug/L | 40.0 | 4.55 | 66.4 | 1-120 | | | |
| 2,4-Dinitrotoluene | 41.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 103 | 39-139 | | | |
| 2,6-Dinitrotoluene | 35.2 | 0.80 | 5.0 | ug/L | 40.0 | ND | 88.0 | 50-158 | | | |
| Di-n-octyl phthalate | 29.4 | 0.60 | 10 | ug/L | 40.0 | ND | 73.6 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 30.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 77.2 | 39-116 | | | |
| Hexachlorobenzene | 31.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 78.0 | 2-152 | | | |
| Hexachlorobutadiene | 26.1 | 0.80 | 1.0 | ug/L | 40.0 | ND | 65.2 | 24-120 | | | |
| Hexachlorocyclopentadiene | 19.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 48.0 | 10-93 | | | |
| Hexachloroethane | 24.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 61.2 | 40-120 | | | |
| Isophorone | 34.6 | 0.30 | 1.0 | ug/L | 40.0 | ND | 86.4 | 21-196 | | | |
| Nitrobenzene | 34.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 85.3 | 35-180 | | | |
| N-Nitrosodimethylamine | 19.3 | 0.30 | 5.0 | ug/L | 40.0 | ND | 48.3 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 32.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 82.3 | 2-230 | | | |
| N-Nitrosodiphenylamine | 32.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 79.9 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 25.8 | 0.60 | 5.0 | ug/L | 40.0 | ND | 64.4 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.0* | | | *ug/L* | *40.0* | | *72.4* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *5.80* | | | *ug/L* | *40.0* | | *14.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.8* | | | *ug/L* | *40.0* | | *81.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.3* | | | *ug/L* | *40.0* | | *80.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *4.23* | | | *ug/L* | *40.0* | | *10.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *23.8* | | | *ug/L* | *40.0* | | *59.5* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03310 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03310-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/13/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *36.0* | | | *ug/L* | *40.0* | | *89.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.4* | | | *ug/L* | *40.0* | | *91.1* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.5* | | | *ug/L* | *40.0* | | *98.8* | *36-141* | | | |
| **LCS (AC03310-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/13/20 | | | | | | |
| Benzidine | 15.0 | 3.00 | 5.00 | ug/L | 79.4 | | 18.9 | 12-151 | | | |
| 3,3′-Dichlorobenzidine | 88.8 | 2.00 | 5.00 | ug/L | 79.4 | | 112 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *35.5* | | | *ug/L* | *40.0* | | *88.7* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.9* | | | *ug/L* | *40.0* | | *89.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.7* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| **Matrix Spike (AC03310-MS1)** | | **Source: 20C0441-02** | | | Prepared: 03/05/20 Analyzed: 03/13/20 | | | | | | |
| Benzidine | 14.6 | 3.00 | 5.00 | ug/L | 79.4 | ND | 18.4 | 4-262 | | | |
| 3,3′-Dichlorobenzidine | 95.2 | 2.00 | 5.00 | ug/L | 79.4 | ND | 120 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.9* | | | *ug/L* | *40.0* | | *87.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.1* | | | *ug/L* | *40.0* | | *85.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.5* | | | *ug/L* | *40.0* | | *93.7* | *36-141* | | | |
| **Matrix Spike Dup (AC03310-MSD1)** | | **Source: 20C0441-02** | | | Prepared: 03/05/20 Analyzed: 03/13/20 | | | | | | |
| Benzidine | 15.5 | 3.00 | 5.00 | ug/L | 79.4 | ND | 19.6 | 4-262 | 5.90 | 108 | |
| 3,3′-Dichlorobenzidine | 101 | 2.00 | 5.00 | ug/L | 79.4 | ND | 128 | 4-262 | 6.16 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *34.7* | | | *ug/L* | *40.0* | | *86.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.6* | | | *ug/L* | *40.0* | | *86.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.6* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03513 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03513-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/10/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *42.3* | | | *ug/L* | *40.0* | | *106* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.5* | | | *ug/L* | *40.0* | | *73.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.2* | | | *ug/L* | *40.0* | | *82.9* | *37-139* | | | |
| **LCS (AC03513-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/10/20 | | | | | | |
| Acenaphthene | 28.4 | 0.20 | 0.20 | ug/L | 40.0 | | 70.9 | 60-132 | | | |
| Acenaphthylene | 29.0 | 0.20 | 0.20 | ug/L | 40.0 | | 72.4 | 54-126 | | | |
| Anthracene | 37.7 | 0.090 | 0.20 | ug/L | 40.0 | | 94.3 | 43-120 | | | |
| Benzo (a) anthracene | 34.3 | 0.20 | 0.20 | ug/L | 40.0 | | 85.8 | 42-133 | | | |
| Benzo (a) pyrene | 36.1 | 0.20 | 0.20 | ug/L | 40.0 | | 90.3 | 32-148 | | | |
| Benzo (b) fluoranthene | 39.1 | 0.20 | 0.20 | ug/L | 40.0 | | 97.7 | 42-140 | | | |
| Benzo (g,h,i) perylene | 45.6 | 0.10 | 0.20 | ug/L | 40.0 | | 114 | 2-195 | | | |
| Benzo (k) fluoranthene | 38.6 | 0.20 | 0.20 | ug/L | 40.0 | | 96.4 | 25-146 | | | |
| Chrysene | 38.8 | 0.20 | 0.20 | ug/L | 40.0 | | 96.9 | 44-140 | | | |
| Dibenz (a,h) anthracene | 45.6 | 0.10 | 0.20 | ug/L | 40.0 | | 114 | 2-200 | | | |
| Fluoranthene | 48.2 | 0.070 | 0.20 | ug/L | 40.0 | | 120 | 43-121 | | | |
| Fluorene | 31.7 | 0.20 | 0.20 | ug/L | 40.0 | | 79.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 45.6 | 0.030 | 0.20 | ug/L | 40.0 | | 114 | 2-151 | | | |
| Naphthalene | 26.8 | 0.090 | 0.20 | ug/L | 40.0 | | 67.0 | 36-120 | | | |
| Phenanthrene | 33.7 | 0.10 | 0.20 | ug/L | 40.0 | | 84.3 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 03/24/20 13:03 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03513 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03513-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/10/20 | | | | | | |
| Pyrene | 39.4 | 0.20 | 0.20 | ug/L | 40.0 | | 98.5 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *33.5* | | | *ug/L* | *40.0* | | *83.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.9* | | | *ug/L* | *40.0* | | *89.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *46.5* | | | *ug/L* | *40.0* | | *116* | *37-139* | | | |
| **Matrix Spike (AC03513-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/05/20 Analyzed: 03/10/20 | | | | | | |
| Acenaphthene | 27.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.1 | 47-145 | | | |
| Acenaphthylene | 27.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 67.7 | 33-145 | | | |
| Anthracene | 45.6 | 0.090 | 0.20 | ug/L | 40.0 | ND | 114 | 27-133 | | | |
| Benzo (a) anthracene | 39.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 98.6 | 33-143 | | | |
| Benzo (a) pyrene | 28.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 72.2 | 17-163 | | | |
| Benzo (b) fluoranthene | 43.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 108 | 24-159 | | | |
| Benzo (g,h,i) perylene | 33.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 83.2 | 2-219 | | | |
| Benzo (k) fluoranthene | 34.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 86.6 | 11-162 | | | |
| Chrysene | 41.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 104 | 17-168 | | | |
| Dibenz (a,h) anthracene | 36.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 90.8 | 2-227 | | | |
| Fluoranthene | 36.8 | 0.070 | 0.20 | ug/L | 40.0 | ND | 91.9 | 26-137 | | | |
| Fluorene | 29.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 74.0 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 36.2 | 0.030 | 0.20 | ug/L | 40.0 | ND | 90.4 | 2-171 | | | |
| Naphthalene | 40.1 | 0.090 | 0.20 | ug/L | 40.0 | ND | 100 | 21-133 | | | |
| Phenanthrene | 40.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 100 | 54-120 | | | |
| Pyrene | 44.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 112 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *28.6* | | | *ug/L* | *40.0* | | *71.4* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *42.8* | | | *ug/L* | *40.0* | | *107* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.2* | | | *ug/L* | *40.0* | | *103* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 03/24/20 13:03 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QD-03 | High duplicate RPD due to matrix interference. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
91[illegible]-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C0441



| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | Project No: Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | Site Contact: David Walter |

Signature below authorizes work under terms stated on reverse side.

0.4°C Ukiah

Field Sampler - Print Name & Signature: David Walter David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | 3-3-2020 | 1430 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | 3-3-2020 | 1330 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | 3-3-2020 | 1135 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | —— | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | 3-3-2020 | 1240 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-3-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes**

**TAT**

24 hr ○ 48 hr ○ Lab Approval Required ○ 1 wk ○ 2 wk (standard) ⊗ — Lab Approval Required For Rush

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3-3-20 | 1555 |
| | | 3-3-20 | 18:47 |
| | | 3-3-20 | 21:47 |
| | | | |

CA Geotracker EDF Report: Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

**WORK ORDER**

**20C0441**

Printed: 3/4/2020 8:37:13AM

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 03/18/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/03/20 21:47

Logged In By: Sean Foley — Date Logged In: 03/04/20 08:18

Samples Received at: 8.6 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C0441-01 WMSA-DMW-3s [Water] Sampled 03/03/20 14:30 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 03/31/20 14:30 | | |
| **20C0441-01 WMSA-DMW-3s [Water] Sampled 03/03/20 14:30 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 03/31/20 14:30 | | |
| **20C0441-02 WMSA-DMW-3d [Water] Sampled 03/03/20 13:30 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 03/31/20 13:30 | | |
| **20C0441-02 WMSA-DMW-3d [Water] Sampled 03/03/20 13:30 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 03/31/20 13:30 | | |
| **20C0441-03 WMSA-DMW-7 [Water] Sampled 03/03/20 11:35 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 | BAL Metals | 03/31/20 11:35 | | |
| **20C0441-03 WMSA-DMW-7 [Water] Sampled 03/03/20 11:35 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 03/31/20 11:35 | | |
| **20C0441-04 WMSA-DMW-10 [Water] Sampled 03/03/20 12:40 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 03/31/20 12:40 | | |
| **20C0441-04 WMSA-DMW-10 [Water] Sampled 03/03/20 12:40 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 03/31/20 12:40 | | |

| | | | | | |
|---|---|---|---|---|---|
| [signature] | 3-4-20 | | [signature] | 3-4-20 | 13:30 |
| Relinquished By | Date | Time | Received By | Date | Time |
| [signature] | 3-4-20 | 19:00 | AC | 03/04/20 | 1300 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

02 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C0727

Enclosed are the results of analyses for samples received by the laboratory on 03/04/20 23:12. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/02/20 11:42 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-8s | 20C0727-01 | Water | 03/04/20 13:00 | 03/04/20 23:12 |
| WMSA-DMW-8d | 20C0727-02 | Water | 03/04/20 12:05 | 03/04/20 23:12 |
| WMSA-DMW-11 | 20C0727-03 | Water | 03/04/20 14:15 | 03/04/20 23:12 |
| Blank - Ground Water | 20C0727-04 | Water | 03/04/20 00:00 | 03/04/20 23:12 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.51** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 21:48 | 03/10/20 21:48 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03600 | 03/10/20 22:07 | 03/10/20 22:07 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **1.4** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 22:25 | 03/10/20 22:25 | EPA 218.6 | LRN | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **3.7** | **3.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium** | **4.7** | **0.60** | **4.0** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:19 | EPA 200.8 | MB | 1551 | |
| **Silver** | **0.28** | **0.10** | **0.20** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:19 | EPA 200.8 | MB | 1551 | |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:28 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:27 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:27 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:27 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:37 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **5.1** | **4.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium** | **0.34** | **0.12** | **0.20** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:35 | EPA 200.8 | MB | 1551 | |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **9.3** | **3.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **33** | **0.60** | **4.0** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:35 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:35 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 22:45 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water** | **Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.48** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/11/20 18:19 | 03/11/20 18:19 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-DMW-8d (20C0727-02) Water** | **Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03644 | 03/19/20 00:24 | 03/19/20 00:24 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-11 (20C0727-03) Water** | **Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **1.5** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 00:42 | 03/19/20 00:42 | EPA 218.6 | LRN | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 08:51 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **4.1** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **5.3** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:04 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:00 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| **Selenium, dissolved** | **0.62** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:13 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:31 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:39 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **5.8** | **4.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:08 | EPA 200.8 | MB | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:08 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium, dissolved** | **0.31** | **0.12** | **0.20** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:22 | EPA 200.8 | MB | 1551 | |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/19/20 13:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:39 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **3.6** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/19/20 13:05 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **34** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:22 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/10/20 23:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 19:39 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 17:19 | EPA 1631E | AJC | 2728 | U |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury** | **0.788** | **0.200** | **0.500** | **ng/l** | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 17:27 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury** | **1.41** | **0.200** | **0.500** | **ng/l** | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 17:35 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 15:03 | EPA 1631E | AJC | 2728 | U |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.409** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 15:11 | EPA 1631E | AJC | 2728 | J |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.552** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 15:19 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:40 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:42 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:43 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 08:25 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 08:25 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *84.5 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 08:25* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 08:59 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 08:59 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *109 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 08:59* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 09:34 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 09:34 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *90.5 %* | *39-120* | | | *AC03488* | *03/09/20 06:50* | *03/20/20 09:34* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 18:17 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.5 %* | *76-129* | | | *AC03619* | *03/11/20 08:00* | *03/11/20 18:17* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 18:51 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *101 %* | *76-129* | | | *AC03619* | *03/11/20 08:00* | *03/11/20 18:51* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 19:25 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.7 %* | *76-129* | | | *AC03619* | *03/11/20 08:00* | *03/11/20 19:25* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 13:18 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *94.1 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 13:53 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *95.6 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.8 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 14:28 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *96.0 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.8 %* | *70-130* | | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 13:18 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *94.1 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:18* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 13:53 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *95.6 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.8 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 13:53* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03391 | 03/06/20 07:00 | 03/06/20 14:28 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *96.0 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.8 %* | | *70-130* | | *AC03391* | *03/06/20 07:00* | *03/06/20 14:28* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:17 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *117 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:17* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:17* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *117 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:17* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 18:51 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:51* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:51* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *116 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 18:51* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:25 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:25* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *111 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:25* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:25* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C0727-04) Water Sampled: 03/04/20 00:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 19:59 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:59* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:59* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *109 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 19:59* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water** | **Sampled: 03/04/20 13:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.39** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **5.9** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:04 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *54.2 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *29.2 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *45.8 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *79.6 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *25.4 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *62.1 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:04* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.42** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | **J** |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **4.3** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/17/20 22:39 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *57.3 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *52.2 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *70.0 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *73.2 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *32.0 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *113 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/17/20 22:39* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.38** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **5.0** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 12:41 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *62.8 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *41.0 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *62.8 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *90.2 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *34.6 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *84.5 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 12:41* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 21:24 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 21:24 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *61.5 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:24* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *65.8 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:24* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *53.5 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:24* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 21:57 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 21:57 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *59.7 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:57* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *62.0 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:57* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *86.5 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 21:57* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *63.6 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *71.7 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *53.9 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8s (20C0727-01) Water Sampled: 03/04/20 13:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:11 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *42.9 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *33.6 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *77.8 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 03:49 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-8d (20C0727-02) Water Sampled: 03/04/20 12:05 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *59.3 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:49* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *52.6 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:49* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *90.7 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 03:49* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-11 (20C0727-03) Water Sampled: 03/04/20 14:15 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 04:27 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *50.4 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 04:27* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *52.6 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 04:27* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *89.6 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 04:27* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03600 - General Prep** | | | | | | | | | | | |
| **Blank (AC03600-BLK1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03600-BS1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | | 97.9 | 90-110 | | | |
| **Duplicate (AC03600-DUP1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 0.514 | 0.30 | 1.0 | ug/L | | 0.472 | | | 8.52 | 20 | J |
| **Matrix Spike (AC03600-MS1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 96.7 | 90-110 | | | |
| **Matrix Spike (AC03600-MS2)** | | **Source: 20C1080-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.66 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.6 | 90-110 | | | |
| **Matrix Spike Dup (AC03600-MSD1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.85 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 93.8 | 90-110 | 2.89 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC03572-BLK1)** | | | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03572-BS1)** | | | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.2 | 0.20 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Arsenic | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 19.7 | 0.060 | 0.25 | ug/L | 20.0 | | 98.3 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.6 | 0.30 | 2.0 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | | 95.8 | 85-115 | | | |
| Thallium | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | | 98.2 | 85-115 | | | |
| Zinc | 102 | 4.0 | 5.0 | ug/L | 100 | | 102 | 85-115 | | | |
| **Duplicate (AC03572-DUP1)** | | | **Source: 20C0671-04** | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 1.81 | 1.6 | 2.0 | ug/L | | 2.08 | | | 13.7 | 20 | R-01, J |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | 4.72 | 2.0 | 2.0 | ug/L | | 4.90 | | | 3.87 | 20 | |
| Copper | 1.68 | 1.6 | 2.0 | ug/L | | 1.68 | | | 0.00950 | 20 | R-01, J |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 1.88 | 1.2 | 2.0 | ug/L | | 2.00 | | | 6.46 | 20 | R-01, J |
| Selenium | 3.31 | 1.2 | 8.0 | ug/L | | 2.89 | | | 13.7 | 20 | R-01, J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC03572-DUP1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Silver | 0.247 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | ND | 16 | 20 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC03572-MS1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic | 24.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.08 | 110 | 70-130 | | | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Cadmium | 20.3 | 0.24 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Chromium | 24.2 | 2.0 | 2.0 | ug/L | 20.0 | 4.90 | 96.3 | 70-130 | | | |
| Copper | 21.2 | 1.6 | 2.0 | ug/L | 20.0 | 1.68 | 97.4 | 70-130 | | | |
| Lead | 21.3 | 0.24 | 1.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Nickel | 20.4 | 1.2 | 2.0 | ug/L | 20.0 | 2.00 | 92.1 | 70-130 | | | |
| Selenium | 24.5 | 1.2 | 8.0 | ug/L | 20.0 | 2.89 | 108 | 70-130 | | | |
| Silver | 19.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 97.7 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | | | |
| **Matrix Spike (AC03572-MS2)** | | **Source: 20C1163-01** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 32.9 | 1.6 | 2.0 | ug/L | 20.0 | 12.3 | 103 | 70-130 | | | |
| Beryllium | 21.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 19.9 | 2.0 | 2.0 | ug/L | 20.0 | ND | 99.3 | 70-130 | | | |
| Copper | 55.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.61 | 262 | 70-130 | | | QM-01 |
| Lead | 22.8 | 0.24 | 1.0 | ug/L | 20.0 | 0.806 | 110 | 70-130 | | | |
| Nickel | 19.4 | 1.2 | 2.0 | ug/L | 20.0 | ND | 97.0 | 70-130 | | | |
| Selenium | 20.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Silver | 20.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Zinc | 130 | 16 | 20 | ug/L | 100 | ND | 130 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03572-MSD1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.7 | 0.80 | 2.0 | ug/L | 20.0 | ND | 103 | 70-130 | 0.886 | 20 | |
| Arsenic | 23.6 | 1.6 | 2.0 | ug/L | 20.0 | 2.08 | 107 | 70-130 | 2.57 | 20 | |
| Beryllium | 22.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 114 | 70-130 | 4.48 | 20 | |
| Cadmium | 20.4 | 0.24 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 0.485 | 20 | |
| Chromium | 24.3 | 2.0 | 2.0 | ug/L | 20.0 | 4.90 | 96.9 | 70-130 | 0.428 | 20 | |
| Copper | 21.2 | 1.6 | 2.0 | ug/L | 20.0 | 1.68 | 97.8 | 70-130 | 0.377 | 20 | |
| Lead | 21.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 107 | 70-130 | 0.700 | 20 | |
| Nickel | 20.4 | 1.2 | 2.0 | ug/L | 20.0 | 2.00 | 91.9 | 70-130 | 0.121 | 20 | |
| Selenium | 24.1 | 1.2 | 8.0 | ug/L | 20.0 | 2.89 | 106 | 70-130 | 1.68 | 20 | |
| Silver | 19.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 98.8 | 70-130 | 1.10 | 20 | |
| Thallium | 21.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 107 | 70-130 | 1.44 | 20 | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | 0.0670 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03644 - General Prep** | | | | | | | | | | | |
| **Blank (AC03644-BLK1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03644-BS1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC03644-DUP1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 0.517 | 0.30 | 1.0 | ug/L | | 0.479 | | | 7.63 | 20 | J |
| **Matrix Spike (AC03644-MS1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 98.9 | 90-110 | | | |
| **Matrix Spike (AC03644-MS2)** | | **Source: 20C1080-03** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | ND | 101 | 90-110 | | | |
| **Matrix Spike Dup (AC03644-MSD1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 99.5 | 90-110 | 0.587 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC03427-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03427-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.4 | 0.20 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Arsenic, dissolved | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 85-115 | | | |
| Beryllium, dissolved | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Cadmium, dissolved | 21.3 | 0.060 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Chromium, dissolved | 21.1 | 0.50 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Copper, dissolved | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead, dissolved | 20.8 | 0.060 | 0.25 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Nickel, dissolved | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Selenium, dissolved | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 101 | 4.0 | 5.0 | ug/L | 100 | | 101 | 85-115 | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.89 | 4.0 | 5.0 | ug/L | | 5.04 | | | 3.00 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | 0.122 | 0.12 | 0.20 | ug/L | | 0.136 | | | 11.5 | 20 | R-01, J |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 3.92 | 3.0 | 5.0 | ug/L | | 3.53 | | | 10.5 | 20 | R-01, J |
| Selenium, dissolved | 8.38 | 0.60 | 4.0 | ug/L | | 8.38 | | | 0.0164 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC03427-MRL1)** | | | | | Prepared: 03/09/20 Analyzed: 03/12/20 | | | | | | |
| Beryllium, dissolved | 0.144 | 0.050 | 0.10 | ug/L | 0.160 | | 90.2 | 0-200 | | | |
| **Matrix Spike (AC03427-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 113 | 70-130 | | | |
| Beryllium, dissolved | 19.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Chromium, dissolved | 25.6 | 5.0 | 5.0 | ug/L | 20.0 | ND | 128 | 70-130 | | | |
| Copper, dissolved | 21.5 | 4.0 | 5.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Lead, dissolved | 20.4 | 0.60 | 2.5 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Nickel, dissolved | 29.0 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 127 | 70-130 | | | |
| Selenium, dissolved | 29.3 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 105 | 70-130 | | | |
| Silver, dissolved | 21.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Thallium, dissolved | 20.7 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike (AC03427-MS2)** | | **Source: 20B2972-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Arsenic, dissolved | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | 0.650 | 107 | 70-130 | | | |
| Beryllium, dissolved | 19.7 | 0.050 | 0.10 | ug/L | 20.0 | 0.346 | 96.6 | 70-130 | | | |
| Cadmium, dissolved | 21.1 | 0.060 | 0.10 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Chromium, dissolved | 21.2 | 0.50 | 0.50 | ug/L | 20.0 | 0.864 | 102 | 70-130 | | | |
| Copper, dissolved | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | 2.51 | 101 | 70-130 | | | |
| Lead, dissolved | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | 0.159 | 101 | 70-130 | | | |
| Nickel, dissolved | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | 2.02 | 99.3 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 102 | 4.0 | 5.0 | ug/L | 100 | 6.62 | 95.8 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03427-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | 0.0300 | 20 | |
| Arsenic, dissolved | 26.8 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 109 | 70-130 | 3.25 | 20 | |
| Beryllium, dissolved | 19.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.8 | 70-130 | 2.19 | 20 | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | 0.158 | 20 | |
| Chromium, dissolved | 25.5 | 5.0 | 5.0 | ug/L | 20.0 | ND | 127 | 70-130 | 0.285 | 20 | |
| Copper, dissolved | 21.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 1.42 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.02 | 20 | |
| Nickel, dissolved | 29.4 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 129 | 70-130 | 1.36 | 20 | |
| Selenium, dissolved | 28.5 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 101 | 70-130 | 2.82 | 20 | |
| Silver, dissolved | 20.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | 4.32 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 1.27 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.244 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04016 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC04016-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 0.337 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AC04016-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 4.82 | 0.200 | 0.500 | ng/l | 5.00 | | 96.4 | 77-123 | | | |
| **Matrix Spike (AC04016-MS1)** | | **Source: 20C0543-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 23.2 | 0.200 | 0.500 | ng/l | 25.0 | 2.76 | 81.8 | 71-125 | | | |
| **Matrix Spike (AC04016-MS2)** | | **Source: 20C0729-02** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | 0.234 | 97.4 | 71-125 | | | |
| **Matrix Spike Dup (AC04016-MSD1)** | | **Source: 20C0543-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 21.0 | 0.200 | 0.500 | ng/l | 25.0 | 2.76 | 72.8 | 71-125 | 10.2 | 24 | |
| **Matrix Spike Dup (AC04016-MSD2)** | | **Source: 20C0729-02** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 24.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.234 | 95.7 | 71-125 | 1.81 | 24 | |
| **Reference (AC04016-SRM1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 43.6 | 0.200 | 0.500 | ng/l | 50.0 | | 87.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03896 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC03896-BLK1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AC03896-BS1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 4.70 | 0.200 | 0.500 | ng/l | 5.00 | | 94.0 | 77-123 | | | |
| **Matrix Spike (AC03896-MS1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.6 | 71-125 | | | |
| **Matrix Spike (AC03896-MS2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.5 | 71-125 | | | |
| **Matrix Spike Dup (AC03896-MSD1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.7 | 71-125 | 0.0821 | 24 | |
| **Matrix Spike Dup (AC03896-MSD2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.7 | 71-125 | 0.200 | 24 | |
| **Reference (AC03896-SRM1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 48.2 | 0.200 | 0.500 | ng/l | 50.0 | | 96.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04142 - General Preparation** | | | | | | | | | | | |
| **Blank (AC04142-BLK1)** | | | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC04142-BS1)** | | | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.226 | 0.0020 | 0.0030 | mg/L | 0.200 | | 113 | 85-115 | | | |
| **Duplicate (AC04142-DUP1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AC04142-MS1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.216 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 108 | 85-115 | | | |
| **Matrix Spike (AC04142-MS2)** | | **Source: 20C0905-01** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.219 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 109 | 85-115 | | | |
| **Matrix Spike Dup (AC04142-MSD1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.216 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 108 | 85-115 | 0.0742 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03488 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC03488-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *59.6* | | | *ug/L* | *65.6* | | *90.9* | *39-120* | | | |
| **LCS (AC03488-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1580 | 50 | 250 | ug/L | 2010 | | 78.7 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *54.4* | | | *ug/L* | *65.6* | | *82.9* | *39-120* | | | |
| **LCS (AC03488-BS2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 1860 | 100 | 250 | ug/L | 2080 | | 89.2 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *74.0* | | | *ug/L* | *65.6* | | *113* | *39-120* | | | |
| **LCS Dup (AC03488-BSD1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1450 | 50 | 250 | ug/L | 2010 | | 72.2 | 61-120 | 8.57 | 25 | |
| *Surrogate: Tetratetracontane* | *62.4* | | | *ug/L* | *65.6* | | *95.2* | *39-120* | | | |
| **LCS Dup (AC03488-BSD2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 2100 | 100 | 250 | ug/L | 2080 | | 101 | 71-125 | 12.5 | 25 | |
| *Surrogate: Tetratetracontane* | *74.9* | | | *ug/L* | *65.6* | | *114* | *39-120* | | | |
| **Matrix Spike (AC03488-MS1)** | | **Source: 20C0727-01** | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1670 | 50 | 250 | ug/L | 2010 | ND | 83.1 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *78.7* | | | *ug/L* | *65.6* | | *120* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03619 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03619-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *76-129* | | | |
| **LCS (AC03619-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 180 | 50 | 50 | ug/L | 200 | | 89.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **LCS Dup (AC03619-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 185 | 50 | 50 | ug/L | 200 | | 92.5 | 67-132 | 2.92 | 25 | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *76-129* | | | |
| **Matrix Spike (AC03619-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 211 | 50 | 50 | ug/L | 200 | ND | 106 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.8* | *76-129* | | | |
| **Matrix Spike Dup (AC03619-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 191 | 50 | 50 | ug/L | 200 | ND | 95.5 | 37-156 | 10.1 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03391 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03391-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC03391-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 31.5 | 2.0 | 5.0 | ug/L | 50.0 | | 63.1 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |
| **LCS Dup (AC03391-BSD1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 31.9 | 2.0 | 5.0 | ug/L | 50.0 | | 63.7 | 60-140 | 1.01 | 25 | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.5* | *70-130* | | | |
| **Matrix Spike (AC03391-MS1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 23.4 | 2.0 | 5.0 | ug/L | 50.0 | ND | 46.9 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *24.6* | | | *ug/L* | *25.0* | | *98.4* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.4* | | | *ug/L* | *25.0* | | *89.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.3* | | | *ug/L* | *25.0* | | *89.1* | *70-130* | | | |
| **Matrix Spike Dup (AC03391-MSD1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| Acrolein | 24.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 49.0 | 40-160 | 4.46 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.6* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03391 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03391-BLK1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC03391-BS1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.6 | 0.70 | 1.0 | ug/L | 25.0 | | 130 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |
| **LCS Dup (AC03391-BSD1)** | | | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.2 | 0.70 | 1.0 | ug/L | 25.0 | | 129 | 3-225 | 1.11 | 30 | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.5* | *70-130* | | | |
| **Matrix Spike (AC03391-MS1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 37.1 | 0.70 | 1.0 | ug/L | 25.0 | ND | 148 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *24.6* | | | *ug/L* | *25.0* | | *98.4* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.4* | | | *ug/L* | *25.0* | | *89.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.3* | | | *ug/L* | *25.0* | | *89.1* | *70-130* | | | |
| **Matrix Spike Dup (AC03391-MSD1)** | | **Source: 20C0441-03** | | | Prepared: 03/05/20 Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 129 | 3-305 | 13.8 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.6* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03620-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03620-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 22.2 | 0.40 | 2.0 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Benzene | 20.3 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 65-135 | | | |
| Bromoform | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | | 109 | 70-130 | | | |
| Carbon tetrachloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.7 | 70-130 | | | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | | | |
| Dibromochloromethane | 22.6 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-135 | | | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | | 85.6 | 40-160 | | | |
| Chloroform | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-135 | | | |
| Bromodichloromethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.6 | 65-135 | | | |
| 1,1-Dichloroethane | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.2 | 70-130 | | | |
| 1,2-Dichloroethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.9 | 70-130 | | | |
| 1,1-Dichloroethene | 18.6 | 0.30 | 0.50 | ug/L | 20.0 | | 92.9 | 50-150 | | | |
| 1,2-Dichloropropane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 35-165 | | | |
| cis-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 97.8 | 25-175 | | | |
| trans-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 50-150 | | | |
| Ethylbenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Bromomethane | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 15-185 | | | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 2-205 | | | |
| Methylene chloride | 17.9 | 0.50 | 0.50 | ug/L | 20.0 | | 89.4 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 24.3 | 0.30 | 0.50 | ug/L | 20.0 | | 121 | 60-140 | | | |
| Tetrachloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Toluene | 22.7 | 0.30 | 0.30 | ug/L | 20.0 | | 114 | 70-130 | | | |
| trans-1,2-Dichloroethene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Trichloroethene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Vinyl chloride | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 5-195 | | | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | | | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-130 | | | |
| 1,4-Dichlorobenzene | 19.6 | 0.10 | 0.50 | ug/L | 20.0 | | 98.0 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.8* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC03620-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | | 106 | 60-140 | 4.52 | 25 | |
| Benzene | 19.8 | 0.30 | 0.30 | ug/L | 20.0 | | 99.1 | 65-135 | 2.44 | 25 | |
| Bromoform | 22.3 | 0.30 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.45 | 25 | |
| Carbon tetrachloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 70-130 | 3.31 | 25 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 0.00 | 25 | |
| Dibromochloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 70-135 | 2.88 | 25 | |
| Chloroethane | 15.6 | 0.40 | 0.50 | ug/L | 20.0 | | 78.0 | 40-160 | 9.29 | 25 | |
| Chloroform | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-135 | 4.59 | 25 | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 65-135 | 0.557 | 25 | |
| 1,1-Dichloroethane | 18.3 | 0.30 | 0.50 | ug/L | 20.0 | | 91.4 | 70-130 | 4.08 | 25 | |
| 1,2-Dichloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.3 | 70-130 | 5.13 | 25 | |
| 1,1-Dichloroethene | 17.7 | 0.30 | 0.50 | ug/L | 20.0 | | 88.4 | 50-150 | 4.91 | 25 | |
| 1,2-Dichloropropane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 35-165 | 2.40 | 25 | |
| cis-1,3-Dichloropropene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 25-175 | 11.2 | 25 | |
| trans-1,3-Dichloropropene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 50-150 | 8.66 | 25 | |
| Ethylbenzene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 60-140 | 2.27 | 25 | |
| Bromomethane | 17.2 | 0.40 | 0.50 | ug/L | 20.0 | | 86.0 | 15-185 | 6.09 | 25 | |
| Chloromethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 95.1 | 2-205 | 7.59 | 25 | |
| Methylene chloride | 17.0 | 0.50 | 0.50 | ug/L | 20.0 | | 84.8 | 60-140 | 5.40 | 25 | |
| 1,1,2,2-Tetrachloroethane | 22.6 | 0.30 | 0.50 | ug/L | 20.0 | | 113 | 60-140 | 7.17 | 25 | |
| Tetrachloroethene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 1.97 | 25 | |
| Toluene | 23.0 | 0.30 | 0.30 | ug/L | 20.0 | | 115 | 70-130 | 1.40 | 25 | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | 5.71 | 25 | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 70-130 | 0.151 | 25 | |
| 1,1,2-Trichloroethane | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.69 | 25 | |
| Trichloroethene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.6 | 65-135 | 0.678 | 25 | |
| Vinyl chloride | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.5 | 5-195 | 3.30 | 25 | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | 0.240 | 25 | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-130 | 9.18 | 25 | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 99.8 | 65-135 | 1.82 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03620-MS1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 22.0 | 0.40 | 2.0 | ug/L | 20.0 | ND | 110 | 40-160 | | | |
| Benzene | 21.7 | 0.30 | 0.30 | ug/L | 20.0 | ND | 109 | 37-151 | | | |
| Bromoform | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 45-169 | | | |
| Carbon tetrachloride | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-140 | | | |
| Chlorobenzene | 21.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 37-160 | | | |
| Dibromochloromethane | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 53-149 | | | |
| Chloroethane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 90.1 | 14-230 | | | |
| Chloroform | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 51-138 | | | |
| Bromodichloromethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 35-155 | | | |
| 1,1-Dichloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 59-155 | | | |
| 1,2-Dichloroethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.3 | 49-155 | | | |
| 1,1-Dichloroethene | 20.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 2-234 | | | |
| 1,2-Dichloropropane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 17-183 | | | |
| Ethylbenzene | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 37-162 | | | |
| Bromomethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.2 | 2-242 | | | |
| Chloromethane | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-273 | | | |
| Methylene chloride | 17.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 87.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 46-157 | | | |
| Tetrachloroethene | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 121 | 64-148 | | | |
| Toluene | 24.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 122 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 52-162 | | | |
| 1,1,2-Trichloroethane | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 52-150 | | | |
| Trichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 70-157 | | | |
| Vinyl chloride | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 2-251 | | | |
| 1,2-Dichlorobenzene | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | | | |
| 1,4-Dichlorobenzene | 20.3 | 0.10 | 0.50 | ug/L | 20.0 | ND | 101 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03620-MSD1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | ND | 106 | 40-160 | 3.71 | 60 | |
| Benzene | 20.8 | 0.30 | 0.30 | ug/L | 20.0 | ND | 104 | 37-151 | 4.61 | 61 | |
| Bromoform | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 45-169 | 1.23 | 42 | |
| Carbon tetrachloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 70-140 | 4.29 | 41 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 37-160 | 4.42 | 53 | |
| Dibromochloromethane | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 53-149 | 2.78 | 50 | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 85.6 | 14-230 | 5.18 | 78 | |
| Chloroform | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 51-138 | 3.77 | 54 | |
| Bromodichloromethane | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 100 | 35-155 | 3.54 | 56 | |
| 1,1-Dichloroethane | 19.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 98.7 | 59-155 | 3.04 | 40 | |
| 1,2-Dichloroethane | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 89.1 | 49-155 | 3.53 | 49 | |
| 1,1-Dichloroethene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 2-234 | 2.46 | 32 | |
| 1,2-Dichloropropane | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.6 | 2-210 | 6.46 | 55 | |
| cis-1,3-Dichloropropene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.6 | 2-227 | 6.33 | 58 | |
| trans-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.1 | 17-183 | 8.07 | 86 | |
| Ethylbenzene | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 37-162 | 4.17 | 63 | |
| Bromomethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.4 | 2-242 | 0.217 | 61 | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-273 | 5.92 | 60 | |
| Methylene chloride | 17.3 | 0.50 | 0.50 | ug/L | 20.0 | ND | 86.6 | 2-221 | 1.38 | 28 | |
| 1,1,2,2-Tetrachloroethane | 22.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 114 | 46-157 | 2.64 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 7.26 | 39 | |
| Toluene | 22.9 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 6.42 | 41 | |
| trans-1,2-Dichloroethene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 54-156 | 5.20 | 45 | |
| 1,1,1-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-162 | 5.57 | 36 | |
| 1,1,2-Trichloroethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 52-150 | 3.56 | 45 | |
| Trichloroethene | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.4 | 70-157 | 6.71 | 48 | |
| Vinyl chloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-251 | 1.52 | 66 | |
| 1,2-Dichlorobenzene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 18-190 | 6.09 | 57 | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | 0.225 | 43 | |
| 1,4-Dichlorobenzene | 19.7 | 0.10 | 0.50 | ug/L | 20.0 | ND | 98.6 | 18-190 | 2.75 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03537-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | 0.360 | 0.30 | 2.0 | ug/L | | | | | | | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 3.66 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03537-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *24.4* | | | *ug/L* | *40.0* | | *61.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.3* | | | *ug/L* | *40.0* | | *43.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.0* | | | *ug/L* | *40.0* | | *67.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *36.4* | | | *ug/L* | *40.0* | | *90.9* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *12.4* | | | *ug/L* | *40.0* | | *31.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.4* | | | *ug/L* | *40.0* | | *93.4* | *4-168* | | | |
| **LCS (AC03537-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | 28.5 | 0.70 | 5.0 | ug/L | 40.0 | | 71.2 | 36-120 | | | |
| 2,4-Dichlorophenol | 31.9 | 0.70 | 5.0 | ug/L | 40.0 | | 79.8 | 53-122 | | | |
| 2,4-Dimethylphenol | 28.0 | 1.0 | 2.0 | ug/L | 50.0 | | 55.9 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 38.9 | 3.0 | 5.0 | ug/L | 40.0 | | 97.2 | 53-130 | | | |
| 2,4-Dinitrophenol | 35.1 | 5.0 | 5.0 | ug/L | 40.0 | | 87.8 | 10-173 | | | |
| 2-Nitrophenol | 32.1 | 0.90 | 10 | ug/L | 40.0 | | 80.3 | 45-167 | | | |
| 4-Nitrophenol | 19.2 | 3.0 | 10 | ug/L | 40.0 | | 48.1 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 41.5 | 1.0 | 1.0 | ug/L | 40.0 | | 104 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 28.4 | 0.60 | 5.0 | ug/L | 40.0 | | 70.9 | 36-102 | | | |
| Pentachlorophenol | 42.5 | 4.0 | 5.0 | ug/L | 40.0 | | 106 | 38-152 | | | |
| Phenol | 15.3 | 0.50 | 1.0 | ug/L | 40.0 | | 38.3 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 38.6 | 0.70 | 10 | ug/L | 40.0 | | 96.4 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 30.3 | 0.90 | 5.0 | ug/L | 40.0 | | 75.8 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 27.1 | 0.90 | 1.0 | ug/L | 40.0 | | 67.7 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 37.7 | 1.0 | 2.0 | ug/L | 40.0 | | 94.2 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 38.7 | 3.0 | 5.0 | ug/L | 40.0 | | 96.7 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 28.8 | 1.0 | 5.0 | ug/L | 40.0 | | 72.0 | 65-120 | | | |
| Butyl benzyl phthalate | 21.9 | 0.60 | 10 | ug/L | 40.0 | | 54.8 | 2-140 | | | |
| 2-Chloronaphthalene | 35.8 | 0.60 | 10 | ug/L | 40.0 | | 89.6 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 27.3 | 0.90 | 5.0 | ug/L | 40.0 | | 68.2 | 38-145 | | | |
| 1,2-Dichlorobenzene | 18.4 | 0.60 | 2.0 | ug/L | 40.0 | | 45.9 | 33-93 | | | |
| 1,4-Dichlorobenzene | 17.7 | 0.60 | 1.0 | ug/L | 40.0 | | 44.2 | 32-91 | | | |
| 1,3-Dichlorobenzene | 18.1 | 0.60 | 1.0 | ug/L | 40.0 | | 45.2 | 31-92 | | | |
| Diethyl phthalate | 22.8 | 0.30 | 2.0 | ug/L | 40.0 | | 57.0 | 2-120 | | | |
| Dimethyl phthalate | 15.6 | 0.80 | 2.0 | ug/L | 40.0 | | 39.1 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03537-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| Di-n-butyl phthalate | 26.2 | 0.90 | 10 | ug/L | 40.0 | | 65.4 | 8-120 | | | |
| 2,4-Dinitrotoluene | 37.1 | 0.80 | 5.0 | ug/L | 40.0 | | 92.8 | 48-127 | | | |
| 2,6-Dinitrotoluene | 39.0 | 0.80 | 5.0 | ug/L | 40.0 | | 97.6 | 68-137 | | | |
| Di-n-octyl phthalate | 21.1 | 0.60 | 10 | ug/L | 40.0 | | 52.8 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 31.4 | 0.60 | 1.0 | ug/L | 40.0 | | 78.4 | 52-115 | | | |
| Hexachlorobenzene | 29.8 | 0.90 | 1.0 | ug/L | 40.0 | | 74.4 | 8-142 | | | |
| Hexachlorobutadiene | 18.1 | 0.80 | 1.0 | ug/L | 40.0 | | 45.2 | 38-120 | | | |
| Hexachlorocyclopentadiene | 8.31 | 4.0 | 5.0 | ug/L | 40.0 | | 20.8 | 16-93 | | | |
| Hexachloroethane | 24.8 | 0.60 | 1.0 | ug/L | 40.0 | | 61.9 | 55-120 | | | |
| Isophorone | 34.0 | 0.30 | 1.0 | ug/L | 40.0 | | 84.9 | 47-180 | | | |
| Nitrobenzene | 25.5 | 0.90 | 1.0 | ug/L | 40.0 | | 63.8 | 54-158 | | | |
| N-Nitrosodimethylamine | 18.9 | 0.30 | 5.0 | ug/L | 40.0 | | 47.2 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 33.4 | 0.80 | 5.0 | ug/L | 40.0 | | 83.6 | 14-198 | | | |
| N-Nitrosodiphenylamine | 32.0 | 1.0 | 1.0 | ug/L | 40.0 | | 79.9 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 25.1 | 0.60 | 5.0 | ug/L | 40.0 | | 62.7 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *25.7* | | | *ug/L* | *40.0* | | *64.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *19.8* | | | *ug/L* | *40.0* | | *49.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.7* | | | *ug/L* | *40.0* | | *69.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.4* | | | *ug/L* | *40.0* | | *95.9* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.7* | | | *ug/L* | *40.0* | | *36.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *43.4* | | | *ug/L* | *40.0* | | *109* | *4-168* | | | |
| **Matrix Spike (AC03537-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | 24.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 60.6 | 23-134 | | | |
| 2,4-Dichlorophenol | 26.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 65.0 | 39-135 | | | |
| 2,4-Dimethylphenol | 4.34 | 1.0 | 2.0 | ug/L | 50.0 | ND | 8.68 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 20.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 52.0 | 7-181 | | | |
| 2,4-Dinitrophenol | 16.7 | 5.0 | 5.0 | ug/L | 40.0 | ND | 41.8 | 10-191 | | | |
| 2-Nitrophenol | 29.7 | 0.90 | 10 | ug/L | 40.0 | ND | 74.2 | 29-182 | | | |
| 4-Nitrophenol | 12.5 | 3.0 | 10 | ug/L | 40.0 | ND | 31.2 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 27.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 69.0 | 22-147 | | | |
| Pentachlorophenol | 15.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 37.6 | 14-176 | | | |
| 2-Methylphenol (o-cresol) | 15.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 39.8 | 9-124 | | | |
| Phenol | 11.2 | 0.50 | 1.0 | ug/L | 40.0 | ND | 28.1 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 26.2 | 0.70 | 10 | ug/L | 40.0 | ND | 65.6 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 19.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 49.8 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 17.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 43.6 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03537-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 15.4 | 1.0 | 2.0 | ug/L | 40.0 | ND | 38.5 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 26.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 67.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 21.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 52.7 | 53-127 | | | QM-05 |
| Butyl benzyl phthalate | 18.7 | 0.60 | 10 | ug/L | 40.0 | ND | 46.7 | 2-152 | | | |
| 2-Chloronaphthalene | 14.3 | 0.60 | 10 | ug/L | 40.0 | ND | 35.8 | 60-120 | | | QM-05 |
| 4-Chlorophenyl phenyl ether | 19.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 49.2 | 25-158 | | | |
| 1,4-Dichlorobenzene | 10.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.3 | 3-105 | | | |
| 1,3-Dichlorobenzene | 11.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.8 | 1-106 | | | |
| 1,2-Dichlorobenzene | 11.3 | 0.60 | 2.0 | ug/L | 40.0 | ND | 28.2 | 7-104 | | | |
| Diethyl phthalate | 17.7 | 0.30 | 2.0 | ug/L | 40.0 | ND | 44.3 | 2-120 | | | |
| Dimethyl phthalate | 14.0 | 0.80 | 2.0 | ug/L | 40.0 | ND | 35.1 | 2-120 | | | |
| Di-n-butyl phthalate | 23.4 | 0.90 | 10 | ug/L | 40.0 | 6.51 | 42.2 | 1-120 | | | |
| 2,4-Dinitrotoluene | 24.2 | 0.80 | 5.0 | ug/L | 40.0 | ND | 60.6 | 39-139 | | | |
| 2,6-Dinitrotoluene | 26.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 65.1 | 50-158 | | | |
| Di-n-octyl phthalate | 18.1 | 0.60 | 10 | ug/L | 40.0 | ND | 45.4 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 58.9 | 39-116 | | | |
| Hexachlorobenzene | 24.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 60.1 | 2-152 | | | |
| Hexachlorobutadiene | 11.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 29.2 | 24-120 | | | |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 40.0 | ND | | 10-93 | | | QM-05, U |
| Hexachloroethane | 10.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.1 | 40-120 | | | QM-05 |
| Isophorone | 22.3 | 0.30 | 1.0 | ug/L | 40.0 | ND | 55.8 | 21-196 | | | |
| Nitrobenzene | 17.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 44.2 | 35-180 | | | |
| N-Nitrosodimethylamine | 16.1 | 0.30 | 5.0 | ug/L | 40.0 | ND | 40.2 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 17.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 44.8 | 2-230 | | | |
| N-Nitrosodiphenylamine | 22.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 56.6 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 12.2 | 0.60 | 5.0 | ug/L | 40.0 | ND | 30.6 | 44-142 | | | QM-05 |
| *Surrogate: 2-Fluorobiphenyl* | *16.7* | | | *ug/L* | *40.0* | | *41.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *16.1* | | | *ug/L* | *40.0* | | *40.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *16.4* | | | *ug/L* | *40.0* | | *40.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.0* | | | *ug/L* | *40.0* | | *65.0* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.2* | | | *ug/L* | *40.0* | | *25.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *25.4* | | | *ug/L* | *40.0* | | *63.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03537-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| 2-Chlorophenol | 24.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 60.0 | 23-134 | 0.996 | 61 | |
| 2,4-Dichlorophenol | 23.8 | 0.70 | 5.0 | ug/L | 40.0 | ND | 59.5 | 39-135 | 8.84 | 50 | |
| 2,4-Dimethylphenol | 21.8 | 1.0 | 2.0 | ug/L | 50.0 | ND | 43.6 | 32-120 | 134 | 58 | QM-08 |
| 4,6-Dinitro-2-methylphenol | 25.5 | 3.0 | 5.0 | ug/L | 40.0 | ND | 63.7 | 7-181 | 20.3 | 203 | |
| 2,4-Dinitrophenol | 37.0 | 5.0 | 5.0 | ug/L | 40.0 | ND | 92.6 | 10-191 | 75.5 | 132 | |
| 2-Nitrophenol | 25.0 | 0.90 | 10 | ug/L | 40.0 | ND | 62.4 | 29-182 | 17.2 | 55 | |
| 4-Nitrophenol | 32.8 | 3.0 | 10 | ug/L | 40.0 | ND | 82.1 | 7-132 | 89.8 | 131 | |
| 4-Chloro-3-methylphenol | 24.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 62.3 | 22-147 | 10.2 | 73 | |
| Pentachlorophenol | 44.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 110 | 14-176 | 98.2 | 86 | QM-08 |
| 2-Methylphenol (o-cresol) | 27.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 69.8 | 9-124 | 54.6 | 28 | QM-08 |
| Phenol | 24.8 | 0.50 | 1.0 | ug/L | 40.0 | ND | 62.0 | 5-120 | 75.2 | 64 | QM-08 |
| 2,4,6-Trichlorophenol | 28.4 | 0.70 | 10 | ug/L | 40.0 | ND | 71.0 | 37-144 | 8.05 | 58 | |
| Bis(2-chloroethoxy)methane | 21.8 | 0.90 | 5.0 | ug/L | 40.0 | ND | 54.5 | 33-184 | 9.02 | 54 | |
| Bis(2-chloroethyl)ether | 23.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 57.9 | 12-158 | 28.1 | 108 | |
| Bis(2-chloroisopropyl)ether | 27.1 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.8 | 36-166 | 55.3 | 76 | |
| Bis(2-ethylhexyl)phthalate | 22.5 | 3.0 | 5.0 | ug/L | 40.0 | ND | 56.3 | 8-158 | 17.9 | 82 | |
| 4-Bromophenyl phenyl ether | 17.2 | 1.0 | 5.0 | ug/L | 40.0 | ND | 43.0 | 53-127 | 20.2 | 43 | QM-05 |
| Butyl benzyl phthalate | 25.8 | 0.60 | 10 | ug/L | 40.0 | ND | 64.4 | 2-152 | 32.0 | 60 | |
| 2-Chloronaphthalene | 21.7 | 0.60 | 10 | ug/L | 40.0 | ND | 54.4 | 60-120 | 41.2 | 24 | QM-05, QM-08 |
| 4-Chlorophenyl phenyl ether | 20.5 | 0.90 | 5.0 | ug/L | 40.0 | ND | 51.3 | 25-158 | 4.28 | 61 | |
| 1,4-Dichlorobenzene | 21.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 53.4 | 3-105 | 64.8 | 42 | QM-08 |
| 1,2-Dichlorobenzene | 22.7 | 0.60 | 2.0 | ug/L | 40.0 | ND | 56.8 | 7-104 | 67.5 | 41 | QM-08 |
| 1,3-Dichlorobenzene | 20.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.2 | 1-106 | 59.2 | 41 | QM-08 |
| Diethyl phthalate | 24.9 | 0.30 | 2.0 | ug/L | 40.0 | ND | 62.2 | 2-120 | 33.7 | 100 | |
| Dimethyl phthalate | 21.5 | 0.80 | 2.0 | ug/L | 40.0 | ND | 53.8 | 2-120 | 42.0 | 183 | |
| Di-n-butyl phthalate | 28.1 | 0.90 | 10 | ug/L | 40.0 | 6.51 | 53.9 | 1-120 | 18.1 | 47 | |
| 2,4-Dinitrotoluene | 23.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 59.8 | 39-139 | 1.33 | 42 | |
| 2,6-Dinitrotoluene | 23.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 57.4 | 50-158 | 12.5 | 48 | |
| Di-n-octyl phthalate | 28.4 | 0.60 | 10 | ug/L | 40.0 | ND | 71.0 | 4-146 | 44.0 | 69 | |
| 1,2-Diphenylhydrazine | 16.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 40.4 | 39-116 | 37.2 | 25 | QM-08 |
| Hexachlorobenzene | 19.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 47.6 | 2-152 | 23.2 | 55 | |
| Hexachlorobutadiene | 20.1 | 0.80 | 1.0 | ug/L | 40.0 | ND | 50.2 | 24-120 | 53.0 | 62 | |
| Hexachlorocyclopentadiene | 23.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 57.9 | 10-93 | 200 | 55 | QM-08 |
| Hexachloroethane | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 58.9 | 40-120 | 73.9 | 52 | QM-08 |
| Isophorone | 22.9 | 0.30 | 1.0 | ug/L | 40.0 | ND | 57.4 | 21-196 | 2.74 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03537-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Nitrobenzene | 20.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 51.0 | 35-180 | 14.4 | 62 | |
| N-Nitrosodimethylamine | 9.29 | 0.30 | 5.0 | ug/L | 40.0 | ND | 23.2 | 10-84 | 53.4 | 59 | |
| N-Nitrosodi-n-propylamine | 30.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 75.8 | 2-230 | 51.4 | 87 | |
| N-Nitrosodiphenylamine | 16.7 | 1.0 | 1.0 | ug/L | 40.0 | ND | 41.8 | 40-115 | 30.2 | 25 | QM-08 |
| 1,2,4-Trichlorobenzene | 20.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 50.1 | 44-142 | 48.4 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *44.8* | | | *ug/L* | *40.0* | | *112* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *33.7* | | | *ug/L* | *40.0* | | *84.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.2* | | | *ug/L* | *40.0* | | *101* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.8* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *17.8* | | | *ug/L* | *40.0* | | *44.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *43.3* | | | *ug/L* | *40.0* | | *108* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03594 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03594-BLK1)** | | | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *17.6* | | | *ug/L* | *40.0* | | *44.0* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *19.1* | | | *ug/L* | *40.0* | | *47.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *27.8* | | | *ug/L* | *40.0* | | *69.6* | *36-141* | | | |
| **LCS (AC03594-BS1)** | | | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 12.8 | 3.00 | 5.00 | ug/L | 79.4 | | 16.1 | 12-151 | | | |
| 3,3′-Dichlorobenzidine | 62.2 | 2.00 | 5.00 | ug/L | 79.4 | | 78.4 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *22.1* | | | *ug/L* | *40.0* | | *55.3* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *23.0* | | | *ug/L* | *40.0* | | *57.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *36-141* | | | |
| **Matrix Spike (AC03594-MS1)** | | **Source: 20C0727-03** | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 11.5 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.5 | 4-262 | | | |
| 3,3′-Dichlorobenzidine | 53.7 | 2.00 | 5.00 | ug/L | 79.4 | ND | 67.6 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *21.3* | | | *ug/L* | *40.0* | | *53.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.2* | | | *ug/L* | *40.0* | | *55.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *15.8* | | | *ug/L* | *40.0* | | *39.4* | *36-141* | | | |
| **Matrix Spike Dup (AC03594-MSD1)** | | **Source: 20C0727-03** | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 11.7 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.8 | 4-262 | 1.72 | 108 | |
| 3,3′-Dichlorobenzidine | 56.5 | 2.00 | 5.00 | ug/L | 79.4 | ND | 71.1 | 4-262 | 5.09 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *20.2* | | | *ug/L* | *40.0* | | *50.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *21.2* | | | *ug/L* | *40.0* | | *53.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *18.6* | | | *ug/L* | *40.0* | | *46.6* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04197-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *23.3* | | | *ug/L* | *40.0* | | *58.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *21.5* | | | *ug/L* | *40.0* | | *53.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.2* | | | *ug/L* | *40.0* | | *75.5* | *37-139* | | | |
| **LCS (AC04197-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Acenaphthene | 25.8 | 0.20 | 0.20 | ug/L | 40.0 | | 64.4 | 60-132 | | | |
| Acenaphthylene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | | 65.1 | 54-126 | | | |
| Anthracene | 32.0 | 0.090 | 0.20 | ug/L | 40.0 | | 79.9 | 43-120 | | | |
| Benzo (a) anthracene | 33.0 | 0.20 | 0.20 | ug/L | 40.0 | | 82.5 | 42-133 | | | |
| Benzo (a) pyrene | 30.9 | 0.20 | 0.20 | ug/L | 40.0 | | 77.2 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.0 | 0.20 | 0.20 | ug/L | 40.0 | | 90.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 36.0 | 0.10 | 0.20 | ug/L | 40.0 | | 89.9 | 2-195 | | | |
| Benzo (k) fluoranthene | 39.1 | 0.20 | 0.20 | ug/L | 40.0 | | 97.7 | 25-146 | | | |
| Chrysene | 32.0 | 0.20 | 0.20 | ug/L | 40.0 | | 80.1 | 44-140 | | | |
| Dibenz (a,h) anthracene | 37.8 | 0.10 | 0.20 | ug/L | 40.0 | | 94.4 | 2-200 | | | |
| Fluoranthene | 41.6 | 0.070 | 0.20 | ug/L | 40.0 | | 104 | 43-121 | | | |
| Fluorene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | | 81.5 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 37.7 | 0.030 | 0.20 | ug/L | 40.0 | | 94.2 | 2-151 | | | |
| Naphthalene | 22.4 | 0.090 | 0.20 | ug/L | 40.0 | | 56.0 | 36-120 | | | |
| Phenanthrene | 30.0 | 0.10 | 0.20 | ug/L | 40.0 | | 75.0 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04197-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Pyrene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | | 76.5 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *28.7* | | | *ug/L* | *40.0* | | *71.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.9* | | | *ug/L* | *40.0* | | *57.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.7* | | | *ug/L* | *40.0* | | *84.2* | *37-139* | | | |
| **Matrix Spike (AC04197-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | 17.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 43.6 | 47-145 | | | QM-05 |
| Acenaphthylene | 17.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 44.5 | 33-145 | | | |
| Anthracene | 25.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 64.2 | 27-133 | | | |
| Benzo (a) anthracene | 26.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 66.5 | 33-143 | | | |
| Benzo (a) pyrene | 22.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 55.3 | 17-163 | | | |
| Benzo (b) fluoranthene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.2 | 24-159 | | | |
| Benzo (g,h,i) perylene | 25.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 64.3 | 2-219 | | | |
| Benzo (k) fluoranthene | 29.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 73.2 | 11-162 | | | |
| Chrysene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 65.0 | 17-168 | | | |
| Dibenz (a,h) anthracene | 28.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 70.0 | 2-227 | | | |
| Fluoranthene | 29.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 74.8 | 26-137 | | | |
| Fluorene | 21.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 53.9 | 59-121 | | | QM-05 |
| Indeno (1,2,3-cd) pyrene | 27.5 | 0.030 | 0.20 | ug/L | 40.0 | ND | 68.8 | 2-171 | | | |
| Naphthalene | 18.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 46.0 | 21-133 | | | |
| Phenanthrene | 22.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 57.1 | 54-120 | | | |
| Pyrene | 28.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.2 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *16.7* | | | *ug/L* | *40.0* | | *41.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *17.5* | | | *ug/L* | *40.0* | | *43.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.3* | | | *ug/L* | *40.0* | | *65.7* | *37-139* | | | |
| **Matrix Spike Dup (AC04197-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | 28.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.2 | 47-145 | 48.0 | 48 | |
| Acenaphthylene | 27.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.6 | 33-145 | 42.5 | 74 | |
| Anthracene | 36.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 89.9 | 27-133 | 33.4 | 66 | |
| Benzo (a) anthracene | 37.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.4 | 33-143 | 33.7 | 53 | |
| Benzo (a) pyrene | 37.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.3 | 17-163 | 51.2 | 72 | |
| Benzo (b) fluoranthene | 40.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 101 | 24-159 | 35.9 | 71 | |
| Benzo (g,h,i) perylene | 45.5 | 0.10 | 0.20 | ug/L | 40.0 | ND | 114 | 2-219 | 55.6 | 97 | |
| Benzo (k) fluoranthene | 50.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 125 | 11-162 | 52.2 | 63 | |
| Chrysene | 33.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 84.7 | 17-168 | 26.3 | 87 | |
| Dibenz (a,h) anthracene | 45.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 114 | 2-227 | 48.1 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/02/20 11:42 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04197-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Fluoranthene | 52.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 131 | 26-137 | 54.9 | 66 | |
| Fluorene | 32.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 80.6 | 59-121 | 39.7 | 38 | QM-08 |
| Indeno (1,2,3-cd) pyrene | 45.6 | 0.030 | 0.20 | ug/L | 40.0 | ND | 114 | 2-171 | 49.4 | 99 | |
| Naphthalene | 21.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 53.5 | 21-133 | 15.0 | 65 | |
| Phenanthrene | 34.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 85.2 | 54-120 | 39.5 | 39 | QM-08 |
| Pyrene | 33.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.2 | 52-120 | 15.6 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *23.6* | | | *ug/L* | *40.0* | | *58.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.2* | | | *ug/L* | *40.0* | | *70.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.6* | | | *ug/L* | *40.0* | | *74.0* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/02/20 11:42 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-01 | The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C0727



| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | Project No: Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | Site Contact: David Walter |

Signature below authorizes work under terms stated on reverse side.

1.1°C Ukiah

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Identification** | Date | Time | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | 24 hr / 48 hr / Lab Approval Required / 1 wk / 2 wk (standard) — Lab Approval Required For Rush |
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | 3-4-20 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | 3-4-20 | 1205 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | 3-4-20 | 1115 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-4-20 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | 624 No Acid | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | | 3/4/20 | 1600 |
| | | 3-4-20 | 2008 |
| | | 3-4-20 | 23:12 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ( )

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

**20C0727**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 03/19/20 15:00 (10 day TAT)
Received By: Pete L. Hathaway
Logged In By: Sean Foley
Date Received: 03/04/20 23:12
Date Logged In: 03/05/20 11:45

Samples Received at: 9.7 deg C
All containers intact: YES NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C0727-01 WMSA-DMW-8s [Water] Sampled 03/04/20 13:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 13:00 | | |
| **20C0727-01 WMSA-DMW-8s [Water] Sampled 03/04/20 13:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 13:00 | | |
| **20C0727-02 WMSA-DMW-8d [Water] Sampled 03/04/20 12:05 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 12:05 | | |
| **20C0727-02 WMSA-DMW-8d [Water] Sampled 03/04/20 12:05 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 12:05 | | |
| **20C0727-03 WMSA-DMW-11 [Water] Sampled 03/04/20 14:15 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 14:15 | | |
| **20C0727-03 WMSA-DMW-11 [Water] Sampled 03/04/20 14:15 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 14:15 | | |

| | | | | | |
|---|---|---|---|---|---|
| [signature] | 3-5-20 | | [signature] | 3-9-20 | 13:26 |
| Relinquished By | Date | Time | Received By | Date | Time |
| [signature] | 3-9-20 | 18:05 | AC | 03/12/20 | 1209 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

02 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C0730

Enclosed are the results of analyses for samples received by the laboratory on 03/04/20 23:12. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Surface Water | 04/02/20 14:18 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-SW-A | 20C0730-01 | Water | 03/04/20 10:00 | 03/04/20 23:12 |
| WMSA-SW-B | 20C0730-02 | Water | 03/04/20 11:00 | 03/04/20 23:12 |
| WMSA-SW-C | 20C0730-03 | Water | 03/04/20 13:25 | 03/04/20 23:12 |
| WMSA-SW-D | 20C0730-04 | Water | 03/04/20 11:35 | 03/04/20 23:12 |
| Duplicate | 20C0730-05 | Water | 03/04/20 12:00 | 03/04/20 23:12 |
| Blank | 20C0730-06 | Water | 03/04/20 00:00 | 03/04/20 23:12 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.47** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 19:01 | 03/10/20 19:01 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.58** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 22:44 | 03/10/20 22:44 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.45** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 23:03 | 03/10/20 23:03 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.48** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 23:21 | 03/10/20 23:21 | EPA 218.6 | LRN | 1551 | J |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.40** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 23:40 | 03/10/20 23:40 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:51 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:51 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 03:51 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:01 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:00 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:00 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:00 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:09 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| **Copper** | **6.2** | **4.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **5.4** | **3.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **7.0** | **0.60** | **4.0** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/19/20 14:06 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:08 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:17 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **5.3** | **3.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **6.5** | **0.60** | **4.0** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/19/20 14:13 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:16 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:25 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water** | **Sampled: 03/04/20 12:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:32 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| **Copper** | **5.0** | **4.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **5.5** | **3.0** | **5.0** | **ug/L** | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **6.5** | **0.60** | **4.0** | **ug/L** | 2 | AC03572 | 03/11/20 12:50 | 03/19/20 14:21 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03572 | 03/11/20 12:50 | 03/14/20 04:32 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03572 | 03/11/20 12:50 | 03/13/20 23:33 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.57** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 01:01 | 03/19/20 01:01 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.53** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 01:19 | 03/19/20 01:19 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-C (20C0730-03) Water** | **Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.50** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 01:38 | 03/19/20 01:38 | EPA 218.6 | LRN | 1551 | J |
| **WMSA-SW-D (20C0730-04) Water** | **Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.50** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 01:57 | 03/19/20 01:57 | EPA 218.6 | LRN | 1551 | J |
| **Duplicate (20C0730-05) Water** | **Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.52** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 02:15 | 03/19/20 02:15 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:24 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:30 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| **Selenium, dissolved** | **0.75** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:30 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:30 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:47 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:32 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| **Selenium, dissolved** | **0.85** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:39 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:39 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 20:56 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.5** | **4.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:40 | EPA 200.8 | MB | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:40 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **4.6** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **6.8** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/19/20 13:28 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:47 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:05 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.1** | **4.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:48 | EPA 200.8 | MB | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:48 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/19/20 13:12 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **4.5** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **6.2** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/19/20 13:35 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 00:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:13 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water** | **Sampled: 03/04/20 12:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/18/20 09:56 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **4.1** | **3.0** | **5.0** | **ug/L** | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, J |
| **Selenium, dissolved** | **6.2** | **0.60** | **4.0** | **ug/L** | 2 | AC03427 | 03/09/20 13:30 | 03/19/20 13:43 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC03427 | 03/09/20 13:30 | 03/11/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC03427 | 03/09/20 13:30 | 03/10/20 21:22 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 18:40 | EPA 1631E | AJC | 2728 | U |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 18:48 | EPA 1631E | AJC | 2728 | U |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury** | **0.366** | **0.200** | **0.500** | **ng/l** | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 18:56 | EPA 1631E | AJC | 2728 | J |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury** | **0.417** | **0.200** | **0.500** | **ng/l** | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 19:04 | EPA 1631E | AJC | 2728 | J |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury** | **1.33** | **0.200** | **0.500** | **ng/l** | 1 | AC04016 | 03/30/20 16:00 | 04/01/20 19:12 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 15:28 | EPA 1631E | AJC | 2728 | U |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 15:36 | EPA 1631E | AJC | 2728 | U |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.369** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 16:00 | EPA 1631E | AJC | 2728 | J |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.517** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 16:24 | EPA 1631E | AJC | 2728 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.379** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 16:33 | EPA 1631E | AJC | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:45 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Cyanide (total)** | **0.0023** | **0.0020** | **0.0030** | **mg/L** | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:46 | 10-204-00-1X | EV | 1551 | J |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:48 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:49 | 10-204-00-1X | EV | 1551 | U |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04142 | 03/18/20 08:00 | 03/18/20 14:51 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 11:53 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 11:53 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *96.6 %* | | *39-120* | | *AC03488* | *03/09/20 06:50* | *03/20/20 11:53* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 12:28 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 12:28 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *118 %* | | *39-120* | | *AC03488* | *03/09/20 06:50* | *03/20/20 12:28* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 13:03 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 13:03 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *111 %* | | *39-120* | | *AC03488* | *03/09/20 06:50* | *03/20/20 13:03* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 13:38 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 13:38 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *118 %* | | *39-120* | | *AC03488* | *03/09/20 06:50* | *03/20/20 13:38* | *8015DRO* | *DLD* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 14:13 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03488 | 03/09/20 06:50 | 03/20/20 14:13 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *115 %* | | *39-120* | | *AC03488* | *03/09/20 06:50* | *03/20/20 14:13* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 12:01 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.4 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 12:01* | *8260GRO* | *JV* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 12:36 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *100 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 12:36* | *8260GRO* | *JV* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 13:10 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.7 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 13:10* | *8260GRO* | *JV* | 1551 | |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 13:44 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *100 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 13:44* | *8260GRO* | *JV* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC03619 | 03/11/20 08:00 | 03/11/20 14:18 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *104 %* | | *76-129* | | *AC03619* | *03/11/20 08:00* | *03/11/20 14:18* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 20:12 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.0 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 20:46 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *102 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *93.8 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *88.3 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 21:20 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.6 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 21:54 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *99.5 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *93.8 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 22:28 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *91.0 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 20:12 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *96.0 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:12* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 20:46 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *102 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *93.8 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *88.3 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 20:46* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 21:20 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *92.6 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:20* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 21:54 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *99.5 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *93.8 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 21:54* | *EPA 624.1* | *JV* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03403 | 03/06/20 19:00 | 03/06/20 22:28 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *91.0 %* | | *70-130* | | *AC03403* | *03/06/20 19:00* | *03/06/20 22:28* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:01 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:01* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:01* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:01* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 12:36 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:36* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:36* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 12:36* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:10 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *108 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:10* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 13:44 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *116 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:44* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *115 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:44* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 13:44* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 14:18 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *120 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 14:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *118 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 14:18* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *121 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 14:18* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank (20C0730-06) Water Sampled: 03/04/20 00:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC03620 | 03/11/20 07:30 | 03/11/20 17:43 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *118 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 17:43* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *118 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 17:43* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *116 %* | *70-130* | | | *AC03620* | *03/11/20 07:30* | *03/11/20 17:43* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 01:34 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *85.5 %* | *10-147* | | | *AC03438* | *03/09/20 00:00* | *03/22/20 01:34* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:10 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *78.5 %* | *10-147* | | | *AC03438* | *03/09/20 00:00* | *03/22/20 02:10* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 02:48 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *77.3 %* | *10-147* | | | *AC03438* | *03/09/20 00:00* | *03/22/20 02:48* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 03:25 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *84.7 %* | *10-147* | | | *AC03438* | *03/09/20 00:00* | *03/22/20 03:25* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water** | **Sampled: 03/04/20 12:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC03438 | 03/09/20 00:00 | 03/22/20 04:01 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *85.7 %* | *10-147* | | | *AC03438* | *03/09/20 00:00* | *03/22/20 04:01* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.49** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **5.8** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water Sampled: 03/04/20 10:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:18 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *68.7 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *34.9 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *63.5 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *82.5 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *29.2 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *72.8 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:18* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-B (20C0730-02) Water Sampled: 03/04/20 11:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **6.5** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 13:55 | EPA 625.1 | NBH | 1551 | QM-15, U |
| *Surrogate: 2-Fluorobiphenyl* | | *58.4 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *32.3 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *72.4 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *82.3 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *30.0 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *77.8 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 13:55* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water Sampled: 03/04/20 13:25 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-C (20C0730-03) Water** | **Sampled: 03/04/20 13:25** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.43** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **5.1** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 01:05 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *70.4 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *35.8 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *68.4 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *83.0 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *32.1 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *59.9 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 01:05* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-D (20C0730-04) Water** | **Sampled: 03/04/20 11:35** | **Received: 03/04/20 23:12** | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.48** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **6.0** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 14:31 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *65.8 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *28.2 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *64.4 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *83.9 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *29.0 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *60.6 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 14:31* | *EPA 625.1* | *NBH* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.57** | **0.30** | **2.0** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | **J** |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **3.9** | **0.90** | **10** | **ug/L** | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03537 | 03/10/20 08:00 | 03/18/20 02:18 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *64.5 %* | *27-119* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *17.5 %* | *7-85* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *72.0 %* | *15-314* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *69.4 %* | *36-141* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *22.2 %* | *1-65* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *35.3 %* | *4-168* | | | *AC03537* | *03/10/20 08:00* | *03/18/20 02:18* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 23:05 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 23:05 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *51.6 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *55.7 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *65.0 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 23:39 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/23/20 23:39 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *60.2 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *67.9 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:39* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *66.8 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/23/20 23:39* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water** | **Sampled: 03/04/20 13:25** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 00:13 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 00:13 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *38.7 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:13* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *43.8 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:13* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *62.8 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:13* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-SW-D (20C0730-04) Water** | **Sampled: 03/04/20 11:35** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 00:47 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 00:47 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *60.8 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:47* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *71.5 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:47* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *70.6 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 00:47* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water** | **Sampled: 03/04/20 12:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 01:21 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03594 | 03/11/20 08:00 | 03/24/20 01:21 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *51.0 %* | *27-119* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 01:21* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *65.3 %* | *15-314* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 01:21* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *83.4 %* | *36-141* | | | *AC03594* | *03/11/20 08:00* | *03/24/20 01:21* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-A (20C0730-01) Water** | **Sampled: 03/04/20 10:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:04 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *55.8 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:04* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *48.4 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:04* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *80.7 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:04* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | QM-15, U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | QM-15, U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | QM-15, U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 05:41 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-B (20C0730-02) Water** | **Sampled: 03/04/20 11:00** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *58.2 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *55.1 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *81.3 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 05:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-SW-C (20C0730-03) Water** | **Sampled: 03/04/20 13:25** | | **Received: 03/04/20 23:12** | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:19 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *56.8 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:19* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *53.9 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:19* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *81.6 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:19* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-SW-D (20C0730-04) Water Sampled: 03/04/20 11:35 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *53.1 %* | *24-119* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *59.6 %* | *15-314* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *77.0 %* | *37-139* | | | *AC04197* | *03/10/20 08:00* | *03/19/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04197 | 03/10/20 08:00 | 03/19/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Duplicate (20C0730-05) Water Sampled: 03/04/20 12:00 Received: 03/04/20 23:12** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | | *55.0 %* | *24-119* | | *AC04197* | *03/10/20 08:00* | *03/19/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | | *57.0 %* | *15-314* | | *AC04197* | *03/10/20 08:00* | *03/19/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | | *72.6 %* | *37-139* | | *AC04197* | *03/10/20 08:00* | *03/19/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03600 - General Prep** | | | | | | | | | | | |
| **Blank (AC03600-BLK1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03600-BS1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | | 97.9 | 90-110 | | | |
| **Duplicate (AC03600-DUP1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 0.514 | 0.30 | 1.0 | ug/L | | 0.472 | | | 8.52 | 20 | J |
| **Matrix Spike (AC03600-MS1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 96.7 | 90-110 | | | |
| **Matrix Spike (AC03600-MS2)** | | **Source: 20C1080-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.66 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.6 | 90-110 | | | |
| **Matrix Spike Dup (AC03600-MSD1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.85 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 93.8 | 90-110 | 2.89 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC03572-BLK1)** | | | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03572-BS1)** | | | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.2 | 0.20 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Arsenic | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 19.7 | 0.060 | 0.25 | ug/L | 20.0 | | 98.3 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.6 | 0.30 | 2.0 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | | 95.8 | 85-115 | | | |
| Thallium | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | | 98.2 | 85-115 | | | |
| Zinc | 102 | 4.0 | 5.0 | ug/L | 100 | | 102 | 85-115 | | | |
| **Duplicate (AC03572-DUP1)** | | | **Source: 20C0671-04** | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 1.81 | 1.6 | 2.0 | ug/L | | 2.08 | | | 13.7 | 20 | R-01, J |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | 4.72 | 2.0 | 2.0 | ug/L | | 4.90 | | | 3.87 | 20 | |
| Copper | 1.68 | 1.6 | 2.0 | ug/L | | 1.68 | | | 0.00950 | 20 | R-01, J |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 1.88 | 1.2 | 2.0 | ug/L | | 2.00 | | | 6.46 | 20 | R-01, J |
| Selenium | 3.31 | 1.2 | 8.0 | ug/L | | 2.89 | | | 13.7 | 20 | R-01, J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC03572-DUP1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Silver | 0.247 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | ND | 16 | 20 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC03572-MS1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic | 24.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.08 | 110 | 70-130 | | | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Cadmium | 20.3 | 0.24 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Chromium | 24.2 | 2.0 | 2.0 | ug/L | 20.0 | 4.90 | 96.3 | 70-130 | | | |
| Copper | 21.2 | 1.6 | 2.0 | ug/L | 20.0 | 1.68 | 97.4 | 70-130 | | | |
| Lead | 21.3 | 0.24 | 1.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Nickel | 20.4 | 1.2 | 2.0 | ug/L | 20.0 | 2.00 | 92.1 | 70-130 | | | |
| Selenium | 24.5 | 1.2 | 8.0 | ug/L | 20.0 | 2.89 | 108 | 70-130 | | | |
| Silver | 19.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 97.7 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | | | |
| **Matrix Spike (AC03572-MS2)** | | **Source: 20C1163-01** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 32.9 | 1.6 | 2.0 | ug/L | 20.0 | 12.3 | 103 | 70-130 | | | |
| Beryllium | 21.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 19.9 | 2.0 | 2.0 | ug/L | 20.0 | ND | 99.3 | 70-130 | | | |
| Copper | 55.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.61 | 262 | 70-130 | | | QM-01 |
| Lead | 22.8 | 0.24 | 1.0 | ug/L | 20.0 | 0.806 | 110 | 70-130 | | | |
| Nickel | 19.4 | 1.2 | 2.0 | ug/L | 20.0 | ND | 97.0 | 70-130 | | | |
| Selenium | 20.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Silver | 20.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Zinc | 130 | 16 | 20 | ug/L | 100 | ND | 130 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03572 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03572-MSD1)** | | **Source: 20C0671-04** | | | Prepared: 03/11/20 Analyzed: 03/12/20 | | | | | | |
| Antimony | 20.7 | 0.80 | 2.0 | ug/L | 20.0 | ND | 103 | 70-130 | 0.886 | 20 | |
| Arsenic | 23.6 | 1.6 | 2.0 | ug/L | 20.0 | 2.08 | 107 | 70-130 | 2.57 | 20 | |
| Beryllium | 22.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 114 | 70-130 | 4.48 | 20 | |
| Cadmium | 20.4 | 0.24 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 0.485 | 20 | |
| Chromium | 24.3 | 2.0 | 2.0 | ug/L | 20.0 | 4.90 | 96.9 | 70-130 | 0.428 | 20 | |
| Copper | 21.2 | 1.6 | 2.0 | ug/L | 20.0 | 1.68 | 97.8 | 70-130 | 0.377 | 20 | |
| Lead | 21.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 107 | 70-130 | 0.700 | 20 | |
| Nickel | 20.4 | 1.2 | 2.0 | ug/L | 20.0 | 2.00 | 91.9 | 70-130 | 0.121 | 20 | |
| Selenium | 24.1 | 1.2 | 8.0 | ug/L | 20.0 | 2.89 | 106 | 70-130 | 1.68 | 20 | |
| Silver | 19.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 98.8 | 70-130 | 1.10 | 20 | |
| Thallium | 21.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 107 | 70-130 | 1.44 | 20 | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | 0.0670 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03644 - General Prep** | | | | | | | | | | | |
| **Blank (AC03644-BLK1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03644-BS1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC03644-DUP1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 0.517 | 0.30 | 1.0 | ug/L | | 0.479 | | | 7.63 | 20 | J |
| **Matrix Spike (AC03644-MS1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 98.9 | 90-110 | | | |
| **Matrix Spike (AC03644-MS2)** | | **Source: 20C1080-03** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | ND | 101 | 90-110 | | | |
| **Matrix Spike Dup (AC03644-MSD1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 99.5 | 90-110 | 0.587 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC03427-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03427-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.4 | 0.20 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Arsenic, dissolved | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 85-115 | | | |
| Beryllium, dissolved | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Cadmium, dissolved | 21.3 | 0.060 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Chromium, dissolved | 21.1 | 0.50 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Copper, dissolved | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead, dissolved | 20.8 | 0.060 | 0.25 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Nickel, dissolved | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Selenium, dissolved | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 101 | 4.0 | 5.0 | ug/L | 100 | | 101 | 85-115 | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.89 | 4.0 | 5.0 | ug/L | | 5.04 | | | 3.00 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | 0.122 | 0.12 | 0.20 | ug/L | | 0.136 | | | 11.5 | 20 | R-01, J |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 3.92 | 3.0 | 5.0 | ug/L | | 3.53 | | | 10.5 | 20 | R-01, J |
| Selenium, dissolved | 8.38 | 0.60 | 4.0 | ug/L | | 8.38 | | | 0.0164 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC03427-DUP1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC03427-MRL1)** | | | | | Prepared: 03/09/20 Analyzed: 03/12/20 | | | | | | |
| Beryllium, dissolved | 0.144 | 0.050 | 0.10 | ug/L | 0.160 | | 90.2 | 0-200 | | | |
| **Matrix Spike (AC03427-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Arsenic, dissolved | 27.7 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 113 | 70-130 | | | |
| Beryllium, dissolved | 19.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Chromium, dissolved | 25.6 | 5.0 | 5.0 | ug/L | 20.0 | ND | 128 | 70-130 | | | |
| Copper, dissolved | 21.5 | 4.0 | 5.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Lead, dissolved | 20.4 | 0.60 | 2.5 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Nickel, dissolved | 29.0 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 127 | 70-130 | | | |
| Selenium, dissolved | 29.3 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 105 | 70-130 | | | |
| Silver, dissolved | 21.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Thallium, dissolved | 20.7 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike (AC03427-MS2)** | | **Source: 20B2972-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Arsenic, dissolved | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | 0.650 | 107 | 70-130 | | | |
| Beryllium, dissolved | 19.7 | 0.050 | 0.10 | ug/L | 20.0 | 0.346 | 96.6 | 70-130 | | | |
| Cadmium, dissolved | 21.1 | 0.060 | 0.10 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Chromium, dissolved | 21.2 | 0.50 | 0.50 | ug/L | 20.0 | 0.864 | 102 | 70-130 | | | |
| Copper, dissolved | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | 2.51 | 101 | 70-130 | | | |
| Lead, dissolved | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | 0.159 | 101 | 70-130 | | | |
| Nickel, dissolved | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | 2.02 | 99.3 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc, dissolved | 102 | 4.0 | 5.0 | ug/L | 100 | 6.62 | 95.8 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03427 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03427-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/09/20 Analyzed: 03/10/20 | | | | | | |
| Antimony, dissolved | 21.9 | 2.0 | 5.0 | ug/L | 20.0 | ND | 109 | 70-130 | 0.0300 | 20 | |
| Arsenic, dissolved | 26.8 | 4.0 | 5.0 | ug/L | 20.0 | 5.04 | 109 | 70-130 | 3.25 | 20 | |
| Beryllium, dissolved | 19.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.8 | 70-130 | 2.19 | 20 | |
| Cadmium, dissolved | 21.6 | 0.60 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | 0.158 | 20 | |
| Chromium, dissolved | 25.5 | 5.0 | 5.0 | ug/L | 20.0 | ND | 127 | 70-130 | 0.285 | 20 | |
| Copper, dissolved | 21.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 1.42 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.02 | 20 | |
| Nickel, dissolved | 29.4 | 3.0 | 5.0 | ug/L | 20.0 | 3.53 | 129 | 70-130 | 1.36 | 20 | |
| Selenium, dissolved | 28.5 | 3.0 | 20 | ug/L | 20.0 | 8.38 | 101 | 70-130 | 2.82 | 20 | |
| Silver, dissolved | 20.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | 4.32 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 1.27 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.244 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04016 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC04016-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 0.337 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AC04016-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 4.82 | 0.200 | 0.500 | ng/l | 5.00 | | 96.4 | 77-123 | | | |
| **Matrix Spike (AC04016-MS1)** | | **Source: 20C0543-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 23.2 | 0.200 | 0.500 | ng/l | 25.0 | 2.76 | 81.8 | 71-125 | | | |
| **Matrix Spike (AC04016-MS2)** | | **Source: 20C0729-02** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | 0.234 | 97.4 | 71-125 | | | |
| **Matrix Spike Dup (AC04016-MSD1)** | | **Source: 20C0543-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 21.0 | 0.200 | 0.500 | ng/l | 25.0 | 2.76 | 72.8 | 71-125 | 10.2 | 24 | |
| **Matrix Spike Dup (AC04016-MSD2)** | | **Source: 20C0729-02** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 24.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.234 | 95.7 | 71-125 | 1.81 | 24 | |
| **Reference (AC04016-SRM1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Mercury | 43.6 | 0.200 | 0.500 | ng/l | 50.0 | | 87.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03896 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC03896-BLK1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AC03896-BS1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 4.70 | 0.200 | 0.500 | ng/l | 5.00 | | 94.0 | 77-123 | | | |
| **Matrix Spike (AC03896-MS1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.6 | 71-125 | | | |
| **Matrix Spike (AC03896-MS2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.5 | 71-125 | | | |
| **Matrix Spike Dup (AC03896-MSD1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.7 | 71-125 | 0.0821 | 24 | |
| **Matrix Spike Dup (AC03896-MSD2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.7 | 71-125 | 0.200 | 24 | |
| **Reference (AC03896-SRM1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 48.2 | 0.200 | 0.500 | ng/l | 50.0 | | 96.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04142 - General Preparation** | | | | | | | | | | | |
| **Blank (AC04142-BLK1)** | | | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC04142-BS1)** | | | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.226 | 0.0020 | 0.0030 | mg/L | 0.200 | | 113 | 85-115 | | | |
| **Duplicate (AC04142-DUP1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AC04142-MS1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.216 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 108 | 85-115 | | | |
| **Matrix Spike (AC04142-MS2)** | | **Source: 20C0905-01** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.219 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 109 | 85-115 | | | |
| **Matrix Spike Dup (AC04142-MSD1)** | | **Source: 20C0715-10** | | | Prepared & Analyzed: 03/18/20 | | | | | | |
| Cyanide (total) | 0.216 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 108 | 85-115 | 0.0742 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03488 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC03488-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *59.6* | | | *ug/L* | *65.6* | | *90.9* | *39-120* | | | |
| **LCS (AC03488-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1580 | 50 | 250 | ug/L | 2010 | | 78.7 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *54.4* | | | *ug/L* | *65.6* | | *82.9* | *39-120* | | | |
| **LCS (AC03488-BS2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 1860 | 100 | 250 | ug/L | 2080 | | 89.2 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *74.0* | | | *ug/L* | *65.6* | | *113* | *39-120* | | | |
| **LCS Dup (AC03488-BSD1)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1450 | 50 | 250 | ug/L | 2010 | | 72.2 | 61-120 | 8.57 | 25 | |
| *Surrogate: Tetratetracontane* | *62.4* | | | *ug/L* | *65.6* | | *95.2* | *39-120* | | | |
| **LCS Dup (AC03488-BSD2)** | | | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Motor Oil | 2100 | 100 | 250 | ug/L | 2080 | | 101 | 71-125 | 12.5 | 25 | |
| *Surrogate: Tetratetracontane* | *74.9* | | | *ug/L* | *65.6* | | *114* | *39-120* | | | |
| **Matrix Spike (AC03488-MS1)** | | **Source: 20C0727-01** | | | Prepared: 03/09/20 Analyzed: 03/20/20 | | | | | | |
| TPH as Diesel | 1670 | 50 | 250 | ug/L | 2010 | ND | 83.1 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *78.7* | | | *ug/L* | *65.6* | | *120* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03619 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03619-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *76-129* | | | |
| **LCS (AC03619-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 180 | 50 | 50 | ug/L | 200 | | 89.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **LCS Dup (AC03619-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 185 | 50 | 50 | ug/L | 200 | | 92.5 | 67-132 | 2.92 | 25 | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *76-129* | | | |
| **Matrix Spike (AC03619-MS1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 211 | 50 | 50 | ug/L | 200 | ND | 106 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.8* | *76-129* | | | |
| **Matrix Spike Dup (AC03619-MSD1)** | | **Source: 20C0441-01** | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| TPH as Gasoline | 191 | 50 | 50 | ug/L | 200 | ND | 95.5 | 37-156 | 10.1 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03403 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03403-BLK1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.8* | | | *ug/L* | *25.0* | | *95.2* | *70-130* | | | |
| **LCS (AC03403-BS1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| Acrolein | 37.6 | 2.0 | 5.0 | ug/L | 50.0 | | 75.1 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.0* | | | *ug/L* | *25.0* | | *92.1* | *70-130* | | | |
| **LCS Dup (AC03403-BSD1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| Acrolein | 36.8 | 2.0 | 5.0 | ug/L | 50.0 | | 73.7 | 60-140 | 1.96 | 25 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.7* | | | *ug/L* | *25.0* | | *94.7* | *70-130* | | | |
| **Matrix Spike (AC03403-MS1)** | | **Source: 20C0730-01** | | | Prepared: 03/06/20 Analyzed: 03/07/20 | | | | | | |
| Acrolein | 19.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 39.0 | 40-160 | | | QM-05 |
| *Surrogate: Bromofluorobenzene* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.9* | | | *ug/L* | *25.0* | | *91.5* | *70-130* | | | |
| **Matrix Spike Dup (AC03403-MSD1)** | | **Source: 20C0730-01** | | | Prepared: 03/06/20 Analyzed: 03/07/20 | | | | | | |
| Acrolein | 19.8 | 2.0 | 5.0 | ug/L | 50.0 | ND | 39.6 | 40-160 | 1.48 | 60 | QM-05 |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.5* | | | *ug/L* | *25.0* | | *93.8* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03403 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03403-BLK1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.8* | | | *ug/L* | *25.0* | | *95.2* | *70-130* | | | |
| **LCS (AC03403-BS1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 31.7 | 0.70 | 1.0 | ug/L | 25.0 | | 127 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.0* | | | *ug/L* | *25.0* | | *92.1* | *70-130* | | | |
| **LCS Dup (AC03403-BSD1)** | | | | | Prepared & Analyzed: 03/06/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.0 | 0.70 | 1.0 | ug/L | 25.0 | | 128 | 3-225 | 0.847 | 30 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.7* | | | *ug/L* | *25.0* | | *94.7* | *70-130* | | | |
| **Matrix Spike (AC03403-MS1)** | | **Source: 20C0730-01** | | | Prepared: 03/06/20 Analyzed: 03/07/20 | | | | | | |
| 2-Chloroethylvinyl ether | 32.8 | 0.70 | 1.0 | ug/L | 25.0 | ND | 131 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *22.9* | | | *ug/L* | *25.0* | | *91.5* | *70-130* | | | |
| **Matrix Spike Dup (AC03403-MSD1)** | | **Source: 20C0730-01** | | | Prepared: 03/06/20 Analyzed: 03/07/20 | | | | | | |
| 2-Chloroethylvinyl ether | 31.1 | 0.70 | 1.0 | ug/L | 25.0 | ND | 124 | 3-305 | 5.35 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.5* | | | *ug/L* | *25.0* | | *93.8* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03620-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03620-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 22.2 | 0.40 | 2.0 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Benzene | 20.3 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 65-135 | | | |
| Bromoform | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | | 109 | 70-130 | | | |
| Carbon tetrachloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.7 | 70-130 | | | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | | | |
| Dibromochloromethane | 22.6 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-135 | | | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | | 85.6 | 40-160 | | | |
| Chloroform | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-135 | | | |
| Bromodichloromethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.6 | 65-135 | | | |
| 1,1-Dichloroethane | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.2 | 70-130 | | | |
| 1,2-Dichloroethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.9 | 70-130 | | | |
| 1,1-Dichloroethene | 18.6 | 0.30 | 0.50 | ug/L | 20.0 | | 92.9 | 50-150 | | | |
| 1,2-Dichloropropane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 35-165 | | | |
| cis-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 97.8 | 25-175 | | | |
| trans-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 50-150 | | | |
| Ethylbenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 60-140 | | | |
| Bromomethane | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 15-185 | | | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 2-205 | | | |
| Methylene chloride | 17.9 | 0.50 | 0.50 | ug/L | 20.0 | | 89.4 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 24.3 | 0.30 | 0.50 | ug/L | 20.0 | | 121 | 60-140 | | | |
| Tetrachloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Toluene | 22.7 | 0.30 | 0.30 | ug/L | 20.0 | | 114 | 70-130 | | | |
| trans-1,2-Dichloroethene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Trichloroethene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Vinyl chloride | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 5-195 | | | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | | | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-130 | | | |
| 1,4-Dichlorobenzene | 19.6 | 0.10 | 0.50 | ug/L | 20.0 | | 98.0 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.8* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC03620-BSD1)** | | | | | Prepared: 03/10/20 Analyzed: 03/11/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | | 106 | 60-140 | 4.52 | 25 | |
| Benzene | 19.8 | 0.30 | 0.30 | ug/L | 20.0 | | 99.1 | 65-135 | 2.44 | 25 | |
| Bromoform | 22.3 | 0.30 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.45 | 25 | |
| Carbon tetrachloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 70-130 | 3.31 | 25 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 0.00 | 25 | |
| Dibromochloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 70-135 | 2.88 | 25 | |
| Chloroethane | 15.6 | 0.40 | 0.50 | ug/L | 20.0 | | 78.0 | 40-160 | 9.29 | 25 | |
| Chloroform | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-135 | 4.59 | 25 | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.1 | 65-135 | 0.557 | 25 | |
| 1,1-Dichloroethane | 18.3 | 0.30 | 0.50 | ug/L | 20.0 | | 91.4 | 70-130 | 4.08 | 25 | |
| 1,2-Dichloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.3 | 70-130 | 5.13 | 25 | |
| 1,1-Dichloroethene | 17.7 | 0.30 | 0.50 | ug/L | 20.0 | | 88.4 | 50-150 | 4.91 | 25 | |
| 1,2-Dichloropropane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 35-165 | 2.40 | 25 | |
| cis-1,3-Dichloropropene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 25-175 | 11.2 | 25 | |
| trans-1,3-Dichloropropene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 50-150 | 8.66 | 25 | |
| Ethylbenzene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 60-140 | 2.27 | 25 | |
| Bromomethane | 17.2 | 0.40 | 0.50 | ug/L | 20.0 | | 86.0 | 15-185 | 6.09 | 25 | |
| Chloromethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 95.1 | 2-205 | 7.59 | 25 | |
| Methylene chloride | 17.0 | 0.50 | 0.50 | ug/L | 20.0 | | 84.8 | 60-140 | 5.40 | 25 | |
| 1,1,2,2-Tetrachloroethane | 22.6 | 0.30 | 0.50 | ug/L | 20.0 | | 113 | 60-140 | 7.17 | 25 | |
| Tetrachloroethene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 1.97 | 25 | |
| Toluene | 23.0 | 0.30 | 0.30 | ug/L | 20.0 | | 115 | 70-130 | 1.40 | 25 | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | 5.71 | 25 | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 70-130 | 0.151 | 25 | |
| 1,1,2-Trichloroethane | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 70-130 | 2.69 | 25 | |
| Trichloroethene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.6 | 65-135 | 0.678 | 25 | |
| Vinyl chloride | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.5 | 5-195 | 3.30 | 25 | |
| 1,2-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | 0.240 | 25 | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-130 | 9.18 | 25 | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 99.8 | 65-135 | 1.82 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03620-MS1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 22.0 | 0.40 | 2.0 | ug/L | 20.0 | ND | 110 | 40-160 | | | |
| Benzene | 21.7 | 0.30 | 0.30 | ug/L | 20.0 | ND | 109 | 37-151 | | | |
| Bromoform | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 45-169 | | | |
| Carbon tetrachloride | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-140 | | | |
| Chlorobenzene | 21.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 37-160 | | | |
| Dibromochloromethane | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 53-149 | | | |
| Chloroethane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 90.1 | 14-230 | | | |
| Chloroform | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 51-138 | | | |
| Bromodichloromethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 35-155 | | | |
| 1,1-Dichloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 59-155 | | | |
| 1,2-Dichloroethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.3 | 49-155 | | | |
| 1,1-Dichloroethene | 20.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 2-234 | | | |
| 1,2-Dichloropropane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 17-183 | | | |
| Ethylbenzene | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 37-162 | | | |
| Bromomethane | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.2 | 2-242 | | | |
| Chloromethane | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-273 | | | |
| Methylene chloride | 17.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 87.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 46-157 | | | |
| Tetrachloroethene | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 121 | 64-148 | | | |
| Toluene | 24.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 122 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 52-162 | | | |
| 1,1,2-Trichloroethane | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 52-150 | | | |
| Trichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 70-157 | | | |
| Vinyl chloride | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 2-251 | | | |
| 1,2-Dichlorobenzene | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | | | |
| 1,4-Dichlorobenzene | 20.3 | 0.10 | 0.50 | ug/L | 20.0 | ND | 101 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03620 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03620-MSD1)** | | **Source: 20C0441-02** | | | Prepared: 03/10/20 Analyzed: 03/12/20 | | | | | | |
| Acrylonitrile | 21.2 | 0.40 | 2.0 | ug/L | 20.0 | ND | 106 | 40-160 | 3.71 | 60 | |
| Benzene | 20.8 | 0.30 | 0.30 | ug/L | 20.0 | ND | 104 | 37-151 | 4.61 | 61 | |
| Bromoform | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 105 | 45-169 | 1.23 | 42 | |
| Carbon tetrachloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 70-140 | 4.29 | 41 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 37-160 | 4.42 | 53 | |
| Dibromochloromethane | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 53-149 | 2.78 | 50 | |
| Chloroethane | 17.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 85.6 | 14-230 | 5.18 | 78 | |
| Chloroform | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 51-138 | 3.77 | 54 | |
| Bromodichloromethane | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 100 | 35-155 | 3.54 | 56 | |
| 1,1-Dichloroethane | 19.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 98.7 | 59-155 | 3.04 | 40 | |
| 1,2-Dichloroethane | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 89.1 | 49-155 | 3.53 | 49 | |
| 1,1-Dichloroethene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 2-234 | 2.46 | 32 | |
| 1,2-Dichloropropane | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.6 | 2-210 | 6.46 | 55 | |
| cis-1,3-Dichloropropene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.6 | 2-227 | 6.33 | 58 | |
| trans-1,3-Dichloropropene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.1 | 17-183 | 8.07 | 86 | |
| Ethylbenzene | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 37-162 | 4.17 | 63 | |
| Bromomethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.4 | 2-242 | 0.217 | 61 | |
| Chloromethane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-273 | 5.92 | 60 | |
| Methylene chloride | 17.3 | 0.50 | 0.50 | ug/L | 20.0 | ND | 86.6 | 2-221 | 1.38 | 28 | |
| 1,1,2,2-Tetrachloroethane | 22.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 114 | 46-157 | 2.64 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 7.26 | 39 | |
| Toluene | 22.9 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 6.42 | 41 | |
| trans-1,2-Dichloroethene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 54-156 | 5.20 | 45 | |
| 1,1,1-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-162 | 5.57 | 36 | |
| 1,1,2-Trichloroethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 52-150 | 3.56 | 45 | |
| Trichloroethene | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.4 | 70-157 | 6.71 | 48 | |
| Vinyl chloride | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-251 | 1.52 | 66 | |
| 1,2-Dichlorobenzene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 18-190 | 6.09 | 57 | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | 0.225 | 43 | |
| 1,4-Dichlorobenzene | 19.7 | 0.10 | 0.50 | ug/L | 20.0 | ND | 98.6 | 18-190 | 2.75 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03438 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC03438-BLK1)** | | | | | Prepared: 03/09/20 Analyzed: 03/21/20 | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | | | | | | | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | | | | | | | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | | | | | | | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | | | | | | | U |
| 4,4´-DDT | ND | 0.0030 | 0.010 | ug/L | | | | | | | U |
| 4,4´-DDE | ND | 0.0040 | 0.020 | ug/L | | | | | | | U |
| 4,4´-DDD | ND | 0.0050 | 0.020 | ug/L | | | | | | | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | | | | | | | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | | | | | | | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | | | | | | | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | | | | | | | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | | | | | | | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Dibutylchlorendate* | *0.441* | | | *ug/L* | *0.498* | | *88.6* | *10-147* | | | |
| **LCS (AC03438-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/21/20 | | | | | | |
| Aldrin | 0.226 | 0.0020 | 0.0050 | ug/L | 0.240 | | 94.4 | 42-140 | | | |
| alpha-BHC | 0.212 | 0.0040 | 0.010 | ug/L | 0.240 | | 88.2 | 37-140 | | | |
| beta-BHC | 0.233 | 0.0040 | 0.0050 | ug/L | 0.240 | | 96.9 | 17-147 | | | |
| gamma-BHC (Lindane) | 0.232 | 0.0040 | 0.010 | ug/L | 0.240 | | 96.6 | 32-140 | | | |
| delta-BHC | 0.254 | 0.0020 | 0.0050 | ug/L | 0.240 | | 106 | 19-140 | | | |
| 4,4´-DDT | 0.249 | 0.0030 | 0.010 | ug/L | 0.240 | | 104 | 31-141 | | | |
| 4,4´-DDE | 0.237 | 0.0040 | 0.020 | ug/L | 0.240 | | 98.6 | 30-145 | | | |
| 4,4´-DDD | 0.242 | 0.0050 | 0.020 | ug/L | 0.240 | | 101 | 25-160 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03438 - SVOAs in Water GC** | | | | | | | | | | | |
| **LCS (AC03438-BS1)** | | | | | Prepared: 03/09/20 Analyzed: 03/21/20 | | | | | | |
| Dieldrin | 0.241 | 0.0050 | 0.010 | ug/L | 0.240 | | 100 | 36-146 | | | |
| Endosulfan I | 0.242 | 0.0040 | 0.010 | ug/L | 0.240 | | 101 | 45-153 | | | |
| Endosulfan II | 0.277 | 0.0050 | 0.010 | ug/L | 0.240 | | 115 | 0-202 | | | |
| Endosulfan sulfate | 0.258 | 0.0030 | 0.050 | ug/L | 0.240 | | 108 | 26-144 | | | |
| Endrin | 0.276 | 0.0080 | 0.010 | ug/L | 0.240 | | 115 | 30-147 | | | |
| Endrin aldehyde | 0.240 | 0.0040 | 0.010 | ug/L | 0.240 | | 100 | 45-140 | | | |
| Heptachlor | 0.231 | 0.0050 | 0.010 | ug/L | 0.240 | | 96.1 | 34-140 | | | |
| Heptachlor epoxide | 0.248 | 0.0090 | 0.010 | ug/L | 0.240 | | 103 | 37-142 | | | |
| *Surrogate: Dibutylchlorendate* | *0.399* | | | *ug/L* | *0.498* | | *80.1* | *10-147* | | | |
| **Matrix Spike (AC03438-MS1)** | | **Source: 20C0730-01** | | | Prepared: 03/09/20 Analyzed: 03/22/20 | | | | | | |
| Aldrin | 0.237 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 98.9 | 42-140 | | | |
| alpha-BHC | 0.236 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 98.5 | 37-140 | | | |
| beta-BHC | 0.248 | 0.0040 | 0.0050 | ug/L | 0.240 | ND | 103 | 17-147 | | | |
| gamma-BHC (Lindane) | 0.248 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 103 | 32-140 | | | |
| delta-BHC | 0.270 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 113 | 19-140 | | | |
| 4,4′-DDT | 0.240 | 0.0030 | 0.010 | ug/L | 0.240 | ND | 100 | 25-160 | | | |
| 4,4′-DDE | 0.247 | 0.0040 | 0.020 | ug/L | 0.240 | ND | 103 | 30-145 | | | |
| 4,4′-DDD | 0.261 | 0.0050 | 0.020 | ug/L | 0.240 | ND | 109 | 31-141 | | | |
| Dieldrin | 0.251 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 105 | 36-146 | | | |
| Endosulfan I | 0.252 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 105 | 45-153 | | | |
| Endosulfan II | 0.286 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 119 | 2-202 | | | |
| Endosulfan sulfate | 0.262 | 0.0030 | 0.050 | ug/L | 0.240 | ND | 109 | 26-144 | | | |
| Endrin | 0.287 | 0.0080 | 0.010 | ug/L | 0.240 | ND | 120 | 30-147 | | | |
| Endrin aldehyde | 0.246 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 102 | 45-140 | | | |
| Heptachlor | 0.252 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 105 | 34-140 | | | |
| Heptachlor epoxide | 0.263 | 0.0090 | 0.010 | ug/L | 0.240 | ND | 109 | 37-142 | | | |
| *Surrogate: Dibutylchlorendate* | *0.400* | | | *ug/L* | *0.498* | | *80.4* | *10-147* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03438 - SVOAs in Water GC** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03438-MSD1)** | | **Source: 20C0730-01** | | | Prepared: 03/09/20 Analyzed: 03/22/20 | | | | | | |
| Aldrin | 0.252 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 105 | 42-140 | 6.00 | 35 | |
| alpha-BHC | 0.234 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 97.6 | 37-140 | 0.839 | 36 | |
| beta-BHC | 0.255 | 0.0040 | 0.0050 | ug/L | 0.240 | ND | 106 | 17-147 | 2.86 | 44 | |
| gamma-BHC (Lindane) | 0.252 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 105 | 32-140 | 1.61 | 39 | |
| delta-BHC | 0.281 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 117 | 19-140 | 3.64 | 52 | |
| 4,4′-DDT | 0.250 | 0.0030 | 0.010 | ug/L | 0.240 | ND | 104 | 25-160 | 4.07 | 42 | |
| 4,4′-DDE | 0.251 | 0.0040 | 0.020 | ug/L | 0.240 | ND | 104 | 30-145 | 1.44 | 35 | |
| 4,4′-DDD | 0.269 | 0.0050 | 0.020 | ug/L | 0.240 | ND | 112 | 31-141 | 3.14 | 39 | |
| Dieldrin | 0.258 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 108 | 36-146 | 2.89 | 49 | |
| Endosulfan I | 0.259 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 108 | 45-153 | 2.73 | 28 | |
| Endosulfan II | 0.291 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 121 | 2-202 | 1.61 | 53 | |
| Endosulfan sulfate | 0.277 | 0.0030 | 0.050 | ug/L | 0.240 | ND | 115 | 26-144 | 5.36 | 38 | |
| Endrin | 0.296 | 0.0080 | 0.010 | ug/L | 0.240 | ND | 123 | 30-147 | 3.08 | 48 | |
| Endrin aldehyde | 0.255 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 106 | 45-140 | 3.47 | 35 | |
| Heptachlor | 0.256 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 107 | 34-140 | 1.57 | 43 | |
| Heptachlor epoxide | 0.272 | 0.0090 | 0.010 | ug/L | 0.240 | ND | 113 | 37-142 | 3.48 | 36 | |
| *Surrogate: Dibutylchlorendate* | *0.414* | | | *ug/L* | *0.498* | | *83.2* | *10-147* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03537-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | 0.360 | 0.30 | 2.0 | ug/L | | | | | | | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 3.66 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03537-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *24.4* | | | *ug/L* | *40.0* | | *61.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.3* | | | *ug/L* | *40.0* | | *43.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.0* | | | *ug/L* | *40.0* | | *67.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *36.4* | | | *ug/L* | *40.0* | | *90.9* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *12.4* | | | *ug/L* | *40.0* | | *31.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.4* | | | *ug/L* | *40.0* | | *93.4* | *4-168* | | | |
| **LCS (AC03537-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | 28.5 | 0.70 | 5.0 | ug/L | 40.0 | | 71.2 | 36-120 | | | |
| 2,4-Dichlorophenol | 31.9 | 0.70 | 5.0 | ug/L | 40.0 | | 79.8 | 53-122 | | | |
| 2,4-Dimethylphenol | 28.0 | 1.0 | 2.0 | ug/L | 50.0 | | 55.9 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 38.9 | 3.0 | 5.0 | ug/L | 40.0 | | 97.2 | 53-130 | | | |
| 2,4-Dinitrophenol | 35.1 | 5.0 | 5.0 | ug/L | 40.0 | | 87.8 | 10-173 | | | |
| 2-Nitrophenol | 32.1 | 0.90 | 10 | ug/L | 40.0 | | 80.3 | 45-167 | | | |
| 4-Nitrophenol | 19.2 | 3.0 | 10 | ug/L | 40.0 | | 48.1 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 41.5 | 1.0 | 1.0 | ug/L | 40.0 | | 104 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 28.4 | 0.60 | 5.0 | ug/L | 40.0 | | 70.9 | 36-102 | | | |
| Pentachlorophenol | 42.5 | 4.0 | 5.0 | ug/L | 40.0 | | 106 | 38-152 | | | |
| Phenol | 15.3 | 0.50 | 1.0 | ug/L | 40.0 | | 38.3 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 38.6 | 0.70 | 10 | ug/L | 40.0 | | 96.4 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 30.3 | 0.90 | 5.0 | ug/L | 40.0 | | 75.8 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 27.1 | 0.90 | 1.0 | ug/L | 40.0 | | 67.7 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 37.7 | 1.0 | 2.0 | ug/L | 40.0 | | 94.2 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 38.7 | 3.0 | 5.0 | ug/L | 40.0 | | 96.7 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 28.8 | 1.0 | 5.0 | ug/L | 40.0 | | 72.0 | 65-120 | | | |
| Butyl benzyl phthalate | 21.9 | 0.60 | 10 | ug/L | 40.0 | | 54.8 | 2-140 | | | |
| 2-Chloronaphthalene | 35.8 | 0.60 | 10 | ug/L | 40.0 | | 89.6 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 27.3 | 0.90 | 5.0 | ug/L | 40.0 | | 68.2 | 38-145 | | | |
| 1,4-Dichlorobenzene | 17.7 | 0.60 | 1.0 | ug/L | 40.0 | | 44.2 | 32-91 | | | |
| 1,2-Dichlorobenzene | 18.4 | 0.60 | 2.0 | ug/L | 40.0 | | 45.9 | 33-93 | | | |
| 1,3-Dichlorobenzene | 18.1 | 0.60 | 1.0 | ug/L | 40.0 | | 45.2 | 31-92 | | | |
| Diethyl phthalate | 22.8 | 0.30 | 2.0 | ug/L | 40.0 | | 57.0 | 2-120 | | | |
| Dimethyl phthalate | 15.6 | 0.80 | 2.0 | ug/L | 40.0 | | 39.1 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03537-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| Di-n-butyl phthalate | 26.2 | 0.90 | 10 | ug/L | 40.0 | | 65.4 | 8-120 | | | |
| 2,4-Dinitrotoluene | 37.1 | 0.80 | 5.0 | ug/L | 40.0 | | 92.8 | 48-127 | | | |
| 2,6-Dinitrotoluene | 39.0 | 0.80 | 5.0 | ug/L | 40.0 | | 97.6 | 68-137 | | | |
| Di-n-octyl phthalate | 21.1 | 0.60 | 10 | ug/L | 40.0 | | 52.8 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 31.4 | 0.60 | 1.0 | ug/L | 40.0 | | 78.4 | 52-115 | | | |
| Hexachlorobenzene | 29.8 | 0.90 | 1.0 | ug/L | 40.0 | | 74.4 | 8-142 | | | |
| Hexachlorobutadiene | 18.1 | 0.80 | 1.0 | ug/L | 40.0 | | 45.2 | 38-120 | | | |
| Hexachlorocyclopentadiene | 8.31 | 4.0 | 5.0 | ug/L | 40.0 | | 20.8 | 16-93 | | | |
| Hexachloroethane | 24.8 | 0.60 | 1.0 | ug/L | 40.0 | | 61.9 | 55-120 | | | |
| Isophorone | 34.0 | 0.30 | 1.0 | ug/L | 40.0 | | 84.9 | 47-180 | | | |
| Nitrobenzene | 25.5 | 0.90 | 1.0 | ug/L | 40.0 | | 63.8 | 54-158 | | | |
| N-Nitrosodimethylamine | 18.9 | 0.30 | 5.0 | ug/L | 40.0 | | 47.2 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 33.4 | 0.80 | 5.0 | ug/L | 40.0 | | 83.6 | 14-198 | | | |
| N-Nitrosodiphenylamine | 32.0 | 1.0 | 1.0 | ug/L | 40.0 | | 79.9 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 25.1 | 0.60 | 5.0 | ug/L | 40.0 | | 62.7 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *25.7* | | | *ug/L* | *40.0* | | *64.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *19.8* | | | *ug/L* | *40.0* | | *49.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.7* | | | *ug/L* | *40.0* | | *69.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.4* | | | *ug/L* | *40.0* | | *95.9* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.7* | | | *ug/L* | *40.0* | | *36.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *43.4* | | | *ug/L* | *40.0* | | *109* | *4-168* | | | |
| **Matrix Spike (AC03537-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| 2-Chlorophenol | 24.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 60.6 | 23-134 | | | |
| 2,4-Dichlorophenol | 26.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 65.0 | 39-135 | | | |
| 2,4-Dimethylphenol | 4.34 | 1.0 | 2.0 | ug/L | 50.0 | ND | 8.68 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 20.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 52.0 | 7-181 | | | |
| 2,4-Dinitrophenol | 16.7 | 5.0 | 5.0 | ug/L | 40.0 | ND | 41.8 | 10-191 | | | |
| 2-Nitrophenol | 29.7 | 0.90 | 10 | ug/L | 40.0 | ND | 74.2 | 29-182 | | | |
| 4-Nitrophenol | 12.5 | 3.0 | 10 | ug/L | 40.0 | ND | 31.2 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 27.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 69.0 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 15.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 39.8 | 9-124 | | | |
| Pentachlorophenol | 15.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 37.6 | 14-176 | | | |
| Phenol | 11.2 | 0.50 | 1.0 | ug/L | 40.0 | ND | 28.1 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 26.2 | 0.70 | 10 | ug/L | 40.0 | ND | 65.6 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 19.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 49.8 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 17.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 43.6 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03537-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/17/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 15.4 | 1.0 | 2.0 | ug/L | 40.0 | ND | 38.5 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 26.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 67.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 21.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 52.7 | 53-127 | | | QM-05 |
| Butyl benzyl phthalate | 18.7 | 0.60 | 10 | ug/L | 40.0 | ND | 46.7 | 2-152 | | | |
| 2-Chloronaphthalene | 14.3 | 0.60 | 10 | ug/L | 40.0 | ND | 35.8 | 60-120 | | | QM-05 |
| 4-Chlorophenyl phenyl ether | 19.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 49.2 | 25-158 | | | |
| 1,2-Dichlorobenzene | 11.3 | 0.60 | 2.0 | ug/L | 40.0 | ND | 28.2 | 7-104 | | | |
| 1,3-Dichlorobenzene | 11.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.8 | 1-106 | | | |
| 1,4-Dichlorobenzene | 10.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.3 | 3-105 | | | |
| Diethyl phthalate | 17.7 | 0.30 | 2.0 | ug/L | 40.0 | ND | 44.3 | 2-120 | | | |
| Dimethyl phthalate | 14.0 | 0.80 | 2.0 | ug/L | 40.0 | ND | 35.1 | 2-120 | | | |
| Di-n-butyl phthalate | 23.4 | 0.90 | 10 | ug/L | 40.0 | 6.51 | 42.2 | 1-120 | | | |
| 2,4-Dinitrotoluene | 24.2 | 0.80 | 5.0 | ug/L | 40.0 | ND | 60.6 | 39-139 | | | |
| 2,6-Dinitrotoluene | 26.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 65.1 | 50-158 | | | |
| Di-n-octyl phthalate | 18.1 | 0.60 | 10 | ug/L | 40.0 | ND | 45.4 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 58.9 | 39-116 | | | |
| Hexachlorobenzene | 24.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 60.1 | 2-152 | | | |
| Hexachlorobutadiene | 11.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 29.2 | 24-120 | | | |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 40.0 | ND | | 10-93 | | | QM-05, U |
| Hexachloroethane | 10.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 27.1 | 40-120 | | | QM-05 |
| Isophorone | 22.3 | 0.30 | 1.0 | ug/L | 40.0 | ND | 55.8 | 21-196 | | | |
| Nitrobenzene | 17.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 44.2 | 35-180 | | | |
| N-Nitrosodimethylamine | 16.1 | 0.30 | 5.0 | ug/L | 40.0 | ND | 40.2 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 17.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 44.8 | 2-230 | | | |
| N-Nitrosodiphenylamine | 22.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 56.6 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 12.2 | 0.60 | 5.0 | ug/L | 40.0 | ND | 30.6 | 44-142 | | | QM-05 |
| *Surrogate: 2-Fluorobiphenyl* | *16.7* | | | *ug/L* | *40.0* | | *41.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *16.1* | | | *ug/L* | *40.0* | | *40.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *16.4* | | | *ug/L* | *40.0* | | *40.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.0* | | | *ug/L* | *40.0* | | *65.0* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.2* | | | *ug/L* | *40.0* | | *25.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *25.4* | | | *ug/L* | *40.0* | | *63.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03537-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| 2-Chlorophenol | 24.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 60.0 | 23-134 | 0.996 | 61 | |
| 2,4-Dichlorophenol | 23.8 | 0.70 | 5.0 | ug/L | 40.0 | ND | 59.5 | 39-135 | 8.84 | 50 | |
| 2,4-Dimethylphenol | 21.8 | 1.0 | 2.0 | ug/L | 50.0 | ND | 43.6 | 32-120 | 134 | 58 | QM-08 |
| 4,6-Dinitro-2-methylphenol | 25.5 | 3.0 | 5.0 | ug/L | 40.0 | ND | 63.7 | 7-181 | 20.3 | 203 | |
| 2,4-Dinitrophenol | 37.0 | 5.0 | 5.0 | ug/L | 40.0 | ND | 92.6 | 10-191 | 75.5 | 132 | |
| 2-Nitrophenol | 25.0 | 0.90 | 10 | ug/L | 40.0 | ND | 62.4 | 29-182 | 17.2 | 55 | |
| 4-Nitrophenol | 32.8 | 3.0 | 10 | ug/L | 40.0 | ND | 82.1 | 7-132 | 89.8 | 131 | |
| 4-Chloro-3-methylphenol | 24.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 62.3 | 22-147 | 10.2 | 73 | |
| 2-Methylphenol (o-cresol) | 27.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 69.8 | 9-124 | 54.6 | 28 | QM-08 |
| Pentachlorophenol | 44.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 110 | 14-176 | 98.2 | 86 | QM-08 |
| Phenol | 24.8 | 0.50 | 1.0 | ug/L | 40.0 | ND | 62.0 | 5-120 | 75.2 | 64 | QM-08 |
| 2,4,6-Trichlorophenol | 28.4 | 0.70 | 10 | ug/L | 40.0 | ND | 71.0 | 37-144 | 8.05 | 58 | |
| Bis(2-chloroethoxy)methane | 21.8 | 0.90 | 5.0 | ug/L | 40.0 | ND | 54.5 | 33-184 | 9.02 | 54 | |
| Bis(2-chloroethyl)ether | 23.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 57.9 | 12-158 | 28.1 | 108 | |
| Bis(2-chloroisopropyl)ether | 27.1 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.8 | 36-166 | 55.3 | 76 | |
| Bis(2-ethylhexyl)phthalate | 22.5 | 3.0 | 5.0 | ug/L | 40.0 | ND | 56.3 | 8-158 | 17.9 | 82 | |
| 4-Bromophenyl phenyl ether | 17.2 | 1.0 | 5.0 | ug/L | 40.0 | ND | 43.0 | 53-127 | 20.2 | 43 | QM-05 |
| Butyl benzyl phthalate | 25.8 | 0.60 | 10 | ug/L | 40.0 | ND | 64.4 | 2-152 | 32.0 | 60 | |
| 2-Chloronaphthalene | 21.7 | 0.60 | 10 | ug/L | 40.0 | ND | 54.4 | 60-120 | 41.2 | 24 | QM-05, QM-08 |
| 4-Chlorophenyl phenyl ether | 20.5 | 0.90 | 5.0 | ug/L | 40.0 | ND | 51.3 | 25-158 | 4.28 | 61 | |
| 1,2-Dichlorobenzene | 22.7 | 0.60 | 2.0 | ug/L | 40.0 | ND | 56.8 | 7-104 | 67.5 | 41 | QM-08 |
| 1,4-Dichlorobenzene | 21.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 53.4 | 3-105 | 64.8 | 42 | QM-08 |
| 1,3-Dichlorobenzene | 20.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.2 | 1-106 | 59.2 | 41 | QM-08 |
| Diethyl phthalate | 24.9 | 0.30 | 2.0 | ug/L | 40.0 | ND | 62.2 | 2-120 | 33.7 | 100 | |
| Dimethyl phthalate | 21.5 | 0.80 | 2.0 | ug/L | 40.0 | ND | 53.8 | 2-120 | 42.0 | 183 | |
| Di-n-butyl phthalate | 28.1 | 0.90 | 10 | ug/L | 40.0 | 6.51 | 53.9 | 1-120 | 18.1 | 47 | |
| 2,4-Dinitrotoluene | 23.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 59.8 | 39-139 | 1.33 | 42 | |
| 2,6-Dinitrotoluene | 23.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 57.4 | 50-158 | 12.5 | 48 | |
| Di-n-octyl phthalate | 28.4 | 0.60 | 10 | ug/L | 40.0 | ND | 71.0 | 4-146 | 44.0 | 69 | |
| 1,2-Diphenylhydrazine | 16.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 40.4 | 39-116 | 37.2 | 25 | QM-08 |
| Hexachlorobenzene | 19.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 47.6 | 2-152 | 23.2 | 55 | |
| Hexachlorobutadiene | 20.1 | 0.80 | 1.0 | ug/L | 40.0 | ND | 50.2 | 24-120 | 53.0 | 62 | |
| Hexachlorocyclopentadiene | 23.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 57.9 | 10-93 | 200 | 55 | QM-08 |
| Hexachloroethane | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 58.9 | 40-120 | 73.9 | 52 | QM-08 |
| Isophorone | 22.9 | 0.30 | 1.0 | ug/L | 40.0 | ND | 57.4 | 21-196 | 2.74 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03537 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03537-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Nitrobenzene | 20.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 51.0 | 35-180 | 14.4 | 62 | |
| N-Nitrosodimethylamine | 9.29 | 0.30 | 5.0 | ug/L | 40.0 | ND | 23.2 | 10-84 | 53.4 | 59 | |
| N-Nitrosodi-n-propylamine | 30.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 75.8 | 2-230 | 51.4 | 87 | |
| N-Nitrosodiphenylamine | 16.7 | 1.0 | 1.0 | ug/L | 40.0 | ND | 41.8 | 40-115 | 30.2 | 25 | QM-08 |
| 1,2,4-Trichlorobenzene | 20.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 50.1 | 44-142 | 48.4 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *44.8* | | | *ug/L* | *40.0* | | *112* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *33.7* | | | *ug/L* | *40.0* | | *84.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.2* | | | *ug/L* | *40.0* | | *101* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.8* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *17.8* | | | *ug/L* | *40.0* | | *44.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *43.3* | | | *ug/L* | *40.0* | | *108* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03594 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03594-BLK1)** | | | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *17.6* | | | *ug/L* | *40.0* | | *44.0* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *19.1* | | | *ug/L* | *40.0* | | *47.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *27.8* | | | *ug/L* | *40.0* | | *69.6* | *36-141* | | | |
| **LCS (AC03594-BS1)** | | | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 12.8 | 3.00 | 5.00 | ug/L | 79.4 | | 16.1 | 12-151 | | | |
| 3,3′-Dichlorobenzidine | 62.2 | 2.00 | 5.00 | ug/L | 79.4 | | 78.4 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *22.1* | | | *ug/L* | *40.0* | | *55.3* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *23.0* | | | *ug/L* | *40.0* | | *57.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *36-141* | | | |
| **Matrix Spike (AC03594-MS1)** | | **Source: 20C0727-03** | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 11.5 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.5 | 4-262 | | | |
| 3,3′-Dichlorobenzidine | 53.7 | 2.00 | 5.00 | ug/L | 79.4 | ND | 67.6 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *21.3* | | | *ug/L* | *40.0* | | *53.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.2* | | | *ug/L* | *40.0* | | *55.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *15.8* | | | *ug/L* | *40.0* | | *39.4* | *36-141* | | | |
| **Matrix Spike Dup (AC03594-MSD1)** | | **Source: 20C0727-03** | | | Prepared: 03/11/20 Analyzed: 03/23/20 | | | | | | |
| Benzidine | 11.7 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.8 | 4-262 | 1.72 | 108 | |
| 3,3′-Dichlorobenzidine | 56.5 | 2.00 | 5.00 | ug/L | 79.4 | ND | 71.1 | 4-262 | 5.09 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *20.2* | | | *ug/L* | *40.0* | | *50.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *21.2* | | | *ug/L* | *40.0* | | *53.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *18.6* | | | *ug/L* | *40.0* | | *46.6* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04197-BLK1)** | | | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *23.3* | | | *ug/L* | *40.0* | | *58.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *21.5* | | | *ug/L* | *40.0* | | *53.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.2* | | | *ug/L* | *40.0* | | *75.5* | *37-139* | | | |
| **LCS (AC04197-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Acenaphthene | 25.8 | 0.20 | 0.20 | ug/L | 40.0 | | 64.4 | 60-132 | | | |
| Acenaphthylene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | | 65.1 | 54-126 | | | |
| Anthracene | 32.0 | 0.090 | 0.20 | ug/L | 40.0 | | 79.9 | 43-120 | | | |
| Benzo (a) anthracene | 33.0 | 0.20 | 0.20 | ug/L | 40.0 | | 82.5 | 42-133 | | | |
| Benzo (a) pyrene | 30.9 | 0.20 | 0.20 | ug/L | 40.0 | | 77.2 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.0 | 0.20 | 0.20 | ug/L | 40.0 | | 90.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 36.0 | 0.10 | 0.20 | ug/L | 40.0 | | 89.9 | 2-195 | | | |
| Benzo (k) fluoranthene | 39.1 | 0.20 | 0.20 | ug/L | 40.0 | | 97.7 | 25-146 | | | |
| Chrysene | 32.0 | 0.20 | 0.20 | ug/L | 40.0 | | 80.1 | 44-140 | | | |
| Dibenz (a,h) anthracene | 37.8 | 0.10 | 0.20 | ug/L | 40.0 | | 94.4 | 2-200 | | | |
| Fluoranthene | 41.6 | 0.070 | 0.20 | ug/L | 40.0 | | 104 | 43-121 | | | |
| Fluorene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | | 81.5 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 37.7 | 0.030 | 0.20 | ug/L | 40.0 | | 94.2 | 2-151 | | | |
| Naphthalene | 22.4 | 0.090 | 0.20 | ug/L | 40.0 | | 56.0 | 36-120 | | | |
| Phenanthrene | 30.0 | 0.10 | 0.20 | ug/L | 40.0 | | 75.0 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04197-BS1)** | | | | | Prepared: 03/10/20 Analyzed: 03/18/20 | | | | | | |
| Pyrene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | | 76.5 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *28.7* | | | *ug/L* | *40.0* | | *71.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.9* | | | *ug/L* | *40.0* | | *57.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.7* | | | *ug/L* | *40.0* | | *84.2* | *37-139* | | | |
| **Matrix Spike (AC04197-MS1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | 17.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 43.6 | 47-145 | | | QM-05 |
| Acenaphthylene | 17.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 44.5 | 33-145 | | | |
| Anthracene | 25.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 64.2 | 27-133 | | | |
| Benzo (a) anthracene | 26.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 66.5 | 33-143 | | | |
| Benzo (a) pyrene | 22.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 55.3 | 17-163 | | | |
| Benzo (b) fluoranthene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.2 | 24-159 | | | |
| Benzo (g,h,i) perylene | 25.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 64.3 | 2-219 | | | |
| Benzo (k) fluoranthene | 29.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 73.2 | 11-162 | | | |
| Chrysene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 65.0 | 17-168 | | | |
| Dibenz (a,h) anthracene | 28.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 70.0 | 2-227 | | | |
| Fluoranthene | 29.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 74.8 | 26-137 | | | |
| Fluorene | 21.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 53.9 | 59-121 | | | QM-05 |
| Indeno (1,2,3-cd) pyrene | 27.5 | 0.030 | 0.20 | ug/L | 40.0 | ND | 68.8 | 2-171 | | | |
| Naphthalene | 18.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 46.0 | 21-133 | | | |
| Phenanthrene | 22.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 57.1 | 54-120 | | | |
| Pyrene | 28.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.2 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *16.7* | | | *ug/L* | *40.0* | | *41.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *17.5* | | | *ug/L* | *40.0* | | *43.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.3* | | | *ug/L* | *40.0* | | *65.7* | *37-139* | | | |
| **Matrix Spike Dup (AC04197-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Acenaphthene | 28.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.2 | 47-145 | 48.0 | 48 | |
| Acenaphthylene | 27.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.6 | 33-145 | 42.5 | 74 | |
| Anthracene | 36.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 89.9 | 27-133 | 33.4 | 66 | |
| Benzo (a) anthracene | 37.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.4 | 33-143 | 33.7 | 53 | |
| Benzo (a) pyrene | 37.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.3 | 17-163 | 51.2 | 72 | |
| Benzo (b) fluoranthene | 40.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 101 | 24-159 | 35.9 | 71 | |
| Benzo (g,h,i) perylene | 45.5 | 0.10 | 0.20 | ug/L | 40.0 | ND | 114 | 2-219 | 55.6 | 97 | |
| Benzo (k) fluoranthene | 50.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 125 | 11-162 | 52.2 | 63 | |
| Chrysene | 33.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 84.7 | 17-168 | 26.3 | 87 | |
| Dibenz (a,h) anthracene | 45.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 114 | 2-227 | 48.1 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/02/20 14:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04197 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04197-MSD1)** | | **Source: 20C0730-02** | | | Prepared: 03/10/20 Analyzed: 03/19/20 | | | | | | |
| Fluoranthene | 52.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 131 | 26-137 | 54.9 | 66 | |
| Fluorene | 32.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 80.6 | 59-121 | 39.7 | 38 | QM-08 |
| Indeno (1,2,3-cd) pyrene | 45.6 | 0.030 | 0.20 | ug/L | 40.0 | ND | 114 | 2-171 | 49.4 | 99 | |
| Naphthalene | 21.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 53.5 | 21-133 | 15.0 | 65 | |
| Phenanthrene | 34.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 85.2 | 54-120 | 39.5 | 39 | QM-08 |
| Pyrene | 33.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.2 | 52-120 | 15.6 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *23.6* | | | *ug/L* | *40.0* | | *58.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.2* | | | *ug/L* | *40.0* | | *70.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.6* | | | *ug/L* | *40.0* | | *74.0* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Surface Water | 04/02/20 14:18 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-01 | The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-685-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C0730 Page ____ of ____

| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Surface Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walker |

Signature below authorizes work under terms stated on reverse side.

1.1°C Ukiah

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Identification** | Date | Time | 40ml Vial | Poly | Glass | Sleeve | Other | HCl | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | 608 CTR Pest & PCBs | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide | Equis EDD | J Flags | | 24 hr ○ 48 hr ○ Lab Approval Required. 1 wk ○ 2 wk (standard) ⊘ Lab Approval Required For Rush |
| WMSA-SW-A | 3-4-20 | 1000 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-SW-B | 3-4-20 | 1100 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-C | 3-4-20 | 1325 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-D | 3-4-20 | 1135 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WMSA-SW-E | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| EMSA-SW-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Duplicate | 3-4-20 | 1200 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Blank | 3-4-20 | — | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | 624 No Acro | |
| WC-SEEP-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| WC-SEEP-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | | | |
| Trip Blank - Surface Water | | | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walker | | 3/4/20 | 1600 |
| | | 3-4-20 | 20:08 |
| | | 3-4-20 | 23:12 |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes ○ No (x)

Sampling Company Log Code:

Global ID: EDF to (Email Address)

Travel and Site Time: | Mileage: | Misc. Supplies:

# 20C0730

## Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody

**Client:** Golder Associates - Sunnyvale **Project Manager:** Robbie C. Phillips

**Project:** EMSA/WMSA Sampling **Project Number:** Surface Water

Date Due: 03/19/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway Date Received: 03/04/20 23:12

Logged In By: Sean Foley Date Logged In: 03/05/20 12:35

Samples Received at: 9.7 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C0730-01 WMSA-SW-A [Water] Sampled 03/04/20 10:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 10:00 | | |
| **20C0730-01 WMSA-SW-A [Water] Sampled 03/04/20 10:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 10:00 | | |
| **20C0730-02 WMSA-SW-B [Water] Sampled 03/04/20 11:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 11:00 | | |
| **20C0730-02 WMSA-SW-B [Water] Sampled 03/04/20 11:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 11:00 | | |
| **20C0730-03 WMSA-SW-C [Water] Sampled 03/04/20 13:25 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 13:25 | | |
| **20C0730-03 WMSA-SW-C [Water] Sampled 03/04/20 13:25 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 13:25 | | |
| **20C0730-04 WMSA-SW-D [Water] Sampled 03/04/20 11:35 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 11:35 | | |
| **20C0730-04 WMSA-SW-D [Water] Sampled 03/04/20 11:35 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 11:35 | | |
| **20C0730-05 Duplicate [Water] Sampled 03/04/20 12:00 (GMT-08:00) Pacific Tim** | | | | |
| BAL Hg 1631 | BAL Metals | 04/01/20 12:00 | | |
| **20C0730-05 Duplicate [Water] Sampled 03/04/20 12:00 (GMT-08:00) Pacific Tim** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/01/20 12:00 | | |

| | | | | | |
|---|---|---|---|---|---|
| Relinquished By | 3-5-20 | | Received By | 3-9-20 | 13:26 |
| Relinquished By | 3-9-20 | 19:25 | Received By | 03/12/20 | 1200 |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

03 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C1080

Enclosed are the results of analyses for samples received by the laboratory on 03/09/20 22:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/03/20 11:24 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-6 | 20C1080-01 | Water | 03/09/20 14:55 | 03/09/20 22:30 |
| WMSA-DMW-2 | 20C1080-02 | Water | 03/09/20 13:00 | 03/09/20 22:30 |
| WMSA-DMW-6 | 20C1080-03 | Water | 03/09/20 11:10 | 03/09/20 22:30 |
| Blank - Ground Water | 20C1080-04 | Water | 03/09/20 00:00 | 03/09/20 22:30 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC03600 | 03/10/20 20:15 | 03/10/20 20:15 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **4.0** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/10/20 23:58 | 03/10/20 23:58 | EPA 218.6 | LRN | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.37** | **0.30** | **1.0** | **ug/L** | 1 | AC03600 | 03/11/20 00:17 | 03/11/20 00:17 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **4.7** | **4.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, J |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **3.3** | **3.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, J |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:36 | EPA 200.8 | MB | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:22 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **7.5** | **4.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium** | **0.19** | **0.12** | **0.20** | **ug/L** | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:44 | EPA 200.8 | MB | 1551 | R-01, J |
| **Chromium** | **20** | **5.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | |
| **Copper** | **11** | **4.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **37** | **3.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **7.6** | **0.60** | **4.0** | **ug/L** | 2 | AC03810 | 03/13/20 13:50 | 03/24/20 16:13 | EPA 200.8 | MB | 1551 | |
| **Silver** | **0.22** | **0.10** | **0.20** | **ug/L** | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:44 | EPA 200.8 | MB | 1551 | |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | R-01, U |
| **Zinc** | **98** | **40** | **50** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:30 | EPA 200.8 | MB | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:52 | EPA 200.8 | MB | 1551 | R-01, U |
| **Chromium** | **13** | **5.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | |
| **Copper** | **7.2** | **4.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **13** | **3.0** | **5.0** | **ug/L** | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **0.68** | **0.60** | **4.0** | **ug/L** | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:52 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC03810 | 03/13/20 13:50 | 03/18/20 23:52 | EPA 200.8 | MB | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC03810 | 03/13/20 13:50 | 03/18/20 05:38 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03644 | 03/19/20 02:34 | 03/19/20 02:34 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **4.1** | **0.30** | **1.0** | **ug/L** | 1 | AC03644 | 03/19/20 02:52 | 03/19/20 02:52 | EPA 218.6 | LRN | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC03644 | 03/11/20 19:33 | 03/11/20 19:33 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:29 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:29 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:29 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:04 | EPA 200.8 | MB | 1551 | R-01, U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic, dissolved** | **5.6** | **4.0** | **5.0** | **ug/L** | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, U |
| **Copper, dissolved** | **4.2** | **4.0** | **5.0** | **ug/L** | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, J |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **19** | **3.0** | **5.0** | **ug/L** | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | |
| **Selenium, dissolved** | **8.1** | **0.60** | **4.0** | **ug/L** | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:37 | EPA 200.8 | MB | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:37 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | R-01, U |
| **Zinc, dissolved** | **69** | **40** | **50** | **ug/L** | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:12 | EPA 200.8 | MB | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel, dissolved** | **5.2** | **3.0** | **5.0** | **ug/L** | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04048 | 03/17/20 13:00 | 03/24/20 02:45 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04048 | 03/17/20 13:00 | 03/24/20 01:19 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Mercury | ND | 2.00 | 5.00 | ng/l | 10 | AD03113 | 04/01/20 18:00 | 04/02/20 18:32 | EPA 1631E | AJC | 2728 | R-01, U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Mercury** | **10.9** | **2.00** | **5.00** | **ng/l** | 10 | AD03113 | 04/01/20 18:00 | 04/02/20 18:40 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Mercury** | **33.4** | **0.200** | **0.500** | **ng/l** | 1 | AD03113 | 04/01/20 18:00 | 04/02/20 18:48 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AC03896 | 03/13/20 19:00 | 03/16/20 16:41 | EPA 1631E | AJC | 2728 | R-01, U |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Mercury, dissolved** | **1.00** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 16:49 | EPA 1631E | AJC | 2728 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Mercury, dissolved** | **10.8** | **0.200** | **0.500** | **ng/l** | 1 | AC03896 | 03/13/20 19:00 | 03/16/20 16:57 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water** | **Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | |
| **Cyanide (total)** | **0.0033** | **0.0020** | **0.0030** | **mg/L** | 1 | AC04399 | 03/23/20 09:00 | 03/23/20 14:33 | 10-204-00-1X | EV | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water** | **Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | |
| **Cyanide (total)** | **0.0036** | **0.0020** | **0.0030** | **mg/L** | 1 | AC04399 | 03/23/20 09:00 | 03/23/20 14:35 | 10-204-00-1X | EV | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water** | **Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04399 | 03/23/20 09:00 | 03/23/20 14:36 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 01:01 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 01:01 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *86.7 %* | *39-120* | | | *AC03652* | *03/11/20 14:09* | *03/14/20 01:01* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 01:36 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 01:36 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *110 %* | *39-120* | | | *AC03652* | *03/11/20 14:09* | *03/14/20 01:36* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 02:10 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC03652 | 03/11/20 14:09 | 03/14/20 02:10 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *102 %* | *39-120* | | | *AC03652* | *03/11/20 14:09* | *03/14/20 02:10* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC04364 | 03/21/20 12:00 | 03/21/20 14:30 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.5 %* | *76-129* | | | *AC04364* | *03/21/20 12:00* | *03/21/20 14:30* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC04364 | 03/21/20 12:00 | 03/21/20 15:02 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.9 %* | *76-129* | | | *AC04364* | *03/21/20 12:00* | *03/21/20 15:02* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC04364 | 03/21/20 12:00 | 03/21/20 15:34 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.4 %* | *76-129* | | | *AC04364* | *03/21/20 12:00* | *03/21/20 15:34* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 17:58 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *104 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.7 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 18:33 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *114 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *109 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 19:07 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *102 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *96.4 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *95.3 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C1080-04) Water Sampled: 03/09/20 00:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 19:41 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *107 %* | *70-130* | | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 17:58 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *104 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.7 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 17:58* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 18:33 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *114 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *109 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 18:33* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 19:07 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *102 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *96.4 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *95.3 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:07* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C1080-04) Water Sampled: 03/09/20 00:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC03800 | 03/12/20 15:00 | 03/12/20 19:41 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *107 %* | | *70-130* | | *AC03800* | *03/12/20 15:00* | *03/12/20 19:41* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 14:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *95.0 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 14:30* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:02 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *94.3 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:02* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 15:34 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.2 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:34* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 15:34* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C1080-04) Water Sampled: 03/09/20 00:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/21/20 16:05 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *104 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 16:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *94.0 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 16:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/21/20 16:05* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water** | **Sampled: 03/09/20 14:55** | **Received: 03/09/20 22:30** | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.6** | **0.90** | **10** | **ug/L** | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:14 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *60.8 %* | *27-119* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *35.8 %* | *7-85* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *58.6 %* | *15-314* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *94.2 %* | *36-141* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *22.4 %* | *1-65* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *100 %* | *4-168* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:14* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.31** | **0.30** | **2.0** | **ug/L** | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **1.9** | **0.90** | **10** | **ug/L** | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 21:51 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *55.9 %* | *27-119* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *25.1 %* | *7-85* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *54.2 %* | *15-314* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *95.6 %* | *36-141* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *19.4 %* | *1-65* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *68.1 %* | *4-168* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 21:51* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.34** | **0.30** | **2.0** | **ug/L** | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.3** | **0.90** | **10** | **ug/L** | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC03917 | 03/16/20 08:00 | 03/23/20 22:27 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *75.7 %* | *27-119* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *49.6 %* | *7-85* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *67.8 %* | *15-314* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *98.2 %* | *36-141* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *34.5 %* | *1-65* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *87.6 %* | *4-168* | | | *AC03917* | *03/16/20 08:00* | *03/23/20 22:27* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03947 | 03/16/20 06:59 | 03/30/20 23:25 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03947 | 03/16/20 06:59 | 03/30/20 23:25 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *86.2 %* | *27-119* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:25* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *89.2 %* | *15-314* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:25* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *67.1 %* | *36-141* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:25* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC03947 | 03/16/20 06:59 | 03/30/20 23:59 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC03947 | 03/16/20 06:59 | 03/30/20 23:59 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *85.5 %* | *27-119* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:59* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *89.8 %* | *15-314* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:59* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *78.2 %* | *36-141* | | | *AC03947* | *03/16/20 06:59* | *03/30/20 23:59* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-6 (20C1080-01) Water Sampled: 03/09/20 14:55 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 22:34 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *59.8 %* | *24-119* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 22:34* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *63.6 %* | *15-314* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 22:34* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *71.7 %* | *37-139* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 22:34* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:11 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-2 (20C1080-02) Water Sampled: 03/09/20 13:00 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *55.7 %* | *24-119* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *62.5 %* | *15-314* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *85.6 %* | *37-139* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:11* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-6 (20C1080-03) Water Sampled: 03/09/20 11:10 Received: 03/09/20 22:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04575 | 03/16/20 08:00 | 03/24/20 23:49 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *76.8 %* | *24-119* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:49* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *76.9 %* | *15-314* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:49* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *99.4 %* | *37-139* | | | *AC04575* | *03/16/20 08:00* | *03/24/20 23:49* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03600 - General Prep** | | | | | | | | | | | |
| **Blank (AC03600-BLK1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03600-BS1)** | | | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | | 97.9 | 90-110 | | | |
| **Duplicate (AC03600-DUP1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 0.514 | 0.30 | 1.0 | ug/L | | 0.472 | | | 8.52 | 20 | J |
| **Matrix Spike (AC03600-MS1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 96.7 | 90-110 | | | |
| **Matrix Spike (AC03600-MS2)** | | **Source: 20C1080-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.66 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.6 | 90-110 | | | |
| **Matrix Spike Dup (AC03600-MSD1)** | | **Source: 20C0730-01** | | | Prepared & Analyzed: 03/10/20 | | | | | | |
| Chromium, hexavalent | 9.85 | 0.30 | 1.0 | ug/L | 10.0 | 0.472 | 93.8 | 90-110 | 2.89 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03810 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC03810-BLK1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC03810-BS1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | 20.7 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 22.3 | 0.050 | 0.10 | ug/L | 20.0 | | 111 | 85-115 | | | |
| Cadmium | 21.0 | 0.060 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Chromium | 21.2 | 0.50 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Copper | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 85-115 | | | |
| Lead | 21.1 | 0.060 | 0.25 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Nickel | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 20.9 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Zinc | 99.1 | 4.0 | 5.0 | ug/L | 100 | | 99.1 | 85-115 | | | |
| **Duplicate (AC03810-DUP1)** | | **Source: 20C1194-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 3.01 | 1.6 | 2.0 | ug/L | | 3.03 | | | 0.648 | 20 | |
| Lead | 0.436 | 0.24 | 1.0 | ug/L | | 0.424 | | | 2.69 | 20 | R-01, J |
| Nickel | 2.22 | 1.2 | 2.0 | ug/L | | 2.32 | | | 4.20 | 20 | |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03810 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC03810-DUP1)** | | **Source: 20C1194-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Silver | 0.380 | 0.20 | 0.40 | ug/L | | 0.201 | | | 61.7 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | ND | 16 | 20 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC03810-MRL1)** | | | | | Prepared: 03/13/20 Analyzed: 03/17/20 | | | | | | |
| Lead | 0.427 | 0.060 | 0.25 | ug/L | 0.400 | | 107 | 0-200 | | | |
| Thallium | 0.164 | 0.050 | 0.10 | ug/L | 0.160 | | 102 | 0-200 | | | |
| **Matrix Spike (AC03810-MS1)** | | **Source: 20C1194-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | 20.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 21.9 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Beryllium | 21.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Cadmium | 19.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 99.7 | 70-130 | | | |
| Chromium | 20.4 | 2.0 | 2.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Copper | 21.1 | 1.6 | 2.0 | ug/L | 20.0 | 3.03 | 90.5 | 70-130 | | | |
| Lead | 20.1 | 0.24 | 1.0 | ug/L | 20.0 | 0.424 | 98.6 | 70-130 | | | |
| Nickel | 21.9 | 1.2 | 2.0 | ug/L | 20.0 | 2.32 | 97.8 | 70-130 | | | |
| Selenium | 20.1 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver | 20.3 | 0.20 | 0.40 | ug/L | 20.0 | 0.201 | 101 | 70-130 | | | |
| Thallium | 19.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 97.5 | 70-130 | | | |
| Zinc | 110 | 16 | 20 | ug/L | 100 | ND | 110 | 70-130 | | | |
| **Matrix Spike (AC03810-MS2)** | | **Source: 20C1326-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic | 33.1 | 1.6 | 2.0 | ug/L | 20.0 | 11.8 | 107 | 70-130 | | | |
| Beryllium | 22.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 111 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Chromium | 21.2 | 2.0 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Copper | 19.9 | 1.6 | 2.0 | ug/L | 20.0 | ND | 99.4 | 70-130 | | | |
| Lead | 21.0 | 0.24 | 1.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Nickel | 22.0 | 1.2 | 2.0 | ug/L | 20.0 | 1.33 | 103 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 99.2 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03810 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03810-MSD1)** | | **Source: 20C1194-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Antimony | 21.0 | 0.80 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 3.46 | 20 | |
| Arsenic | 23.1 | 1.6 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | 5.56 | 20 | |
| Beryllium | 22.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 112 | 70-130 | 4.48 | 20 | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | 3.97 | 20 | |
| Chromium | 21.0 | 2.0 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 2.89 | 20 | |
| Copper | 22.1 | 1.6 | 2.0 | ug/L | 20.0 | 3.03 | 95.4 | 70-130 | 4.55 | 20 | |
| Lead | 20.9 | 0.24 | 1.0 | ug/L | 20.0 | 0.424 | 102 | 70-130 | 3.76 | 20 | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 2.32 | 100 | 70-130 | 2.35 | 20 | |
| Selenium | 21.1 | 1.2 | 8.0 | ug/L | 20.0 | ND | 106 | 70-130 | 4.95 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | 0.201 | 101 | 70-130 | 0.520 | 20 | |
| Thallium | 20.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 5.32 | 20 | |
| Zinc | 98.8 | 16 | 20 | ug/L | 100 | ND | 98.8 | 70-130 | 10.7 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03644 - General Prep** | | | | | | | | | | | |
| **Blank (AC03644-BLK1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC03644-BS1)** | | | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC03644-DUP1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 0.517 | 0.30 | 1.0 | ug/L | | 0.479 | | | 7.63 | 20 | J |
| **Matrix Spike (AC03644-MS1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 98.9 | 90-110 | | | |
| **Matrix Spike (AC03644-MS2)** | | **Source: 20C1080-03** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | ND | 101 | 90-110 | | | |
| **Matrix Spike Dup (AC03644-MSD1)** | | **Source: 20C0727-01** | | | Prepared & Analyzed: 03/11/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.479 | 99.5 | 90-110 | 0.587 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04048 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04048-BLK1)** | | | | | Prepared: 03/17/20 Analyzed: 03/24/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04048-BS1)** | | | | | Prepared: 03/17/20 Analyzed: 03/24/20 | | | | | | |
| Antimony, dissolved | 21.7 | 0.20 | 0.50 | ug/L | 20.0 | | 109 | 85-115 | | | |
| Arsenic, dissolved | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Beryllium, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Cadmium, dissolved | 21.0 | 0.060 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Chromium, dissolved | 21.8 | 0.50 | 0.50 | ug/L | 20.0 | | 109 | 85-115 | | | |
| Copper, dissolved | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead, dissolved | 19.8 | 0.060 | 0.25 | ug/L | 20.0 | | 99.0 | 85-115 | | | |
| Nickel, dissolved | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | | 110 | 85-115 | | | |
| Selenium, dissolved | 21.6 | 0.30 | 2.0 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Silver, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 19.8 | 0.050 | 0.10 | ug/L | 20.0 | | 98.8 | 85-115 | | | |
| Zinc, dissolved | 105 | 4.0 | 5.0 | ug/L | 100 | | 105 | 85-115 | | | |
| **Duplicate (AC04048-DUP1)** | | **Source: 20C1080-01** | | | Prepared: 03/17/20 Analyzed: 03/24/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04048 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04048-DUP1)** | | **Source: 20C1080-01** | | | Prepared: 03/17/20 Analyzed: 03/24/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC04048-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/17/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.3 | 2.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Arsenic, dissolved | 26.6 | 4.0 | 5.0 | ug/L | 20.0 | ND | 133 | 70-130 | | | QM-01 |
| Beryllium, dissolved | 21.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Cadmium, dissolved | 20.4 | 0.12 | 0.20 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Chromium, dissolved | 20.3 | 5.0 | 5.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper, dissolved | 20.4 | 4.0 | 5.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Lead, dissolved | 20.8 | 0.60 | 2.5 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Nickel, dissolved | 22.1 | 3.0 | 5.0 | ug/L | 20.0 | ND | 110 | 70-130 | | | |
| Selenium, dissolved | 21.0 | 0.60 | 4.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Silver, dissolved | 19.9 | 0.10 | 0.20 | ug/L | 20.0 | ND | 99.6 | 70-130 | | | |
| Thallium, dissolved | 21.0 | 0.50 | 1.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc, dissolved | 98.9 | 40 | 50 | ug/L | 100 | ND | 98.9 | 70-130 | | | |
| **Matrix Spike Dup (AC04048-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/17/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.2 | 2.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 0.418 | 20 | |
| Arsenic, dissolved | 26.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 131 | 70-130 | 1.25 | 20 | QM-01 |
| Beryllium, dissolved | 21.7 | 0.50 | 1.0 | ug/L | 20.0 | ND | 109 | 70-130 | 0.829 | 20 | |
| Cadmium, dissolved | 20.3 | 0.12 | 0.20 | ug/L | 20.0 | ND | 102 | 70-130 | 0.345 | 20 | |
| Chromium, dissolved | 20.5 | 5.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 1.25 | 20 | |
| Copper, dissolved | 20.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | 1.82 | 20 | |
| Lead, dissolved | 21.0 | 0.60 | 2.5 | ug/L | 20.0 | ND | 105 | 70-130 | 0.748 | 20 | |
| Nickel, dissolved | 22.0 | 3.0 | 5.0 | ug/L | 20.0 | ND | 110 | 70-130 | 0.225 | 20 | |
| Selenium, dissolved | 20.7 | 0.60 | 4.0 | ug/L | 20.0 | ND | 104 | 70-130 | 1.37 | 20 | |
| Silver, dissolved | 19.8 | 0.10 | 0.20 | ug/L | 20.0 | ND | 99.2 | 70-130 | 0.353 | 20 | |
| Thallium, dissolved | 21.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 106 | 70-130 | 0.476 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 2.63 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03113 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03113-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/02/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03113-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/02/20 | | | | | | |
| Mercury | 4.42 | 0.200 | 0.500 | ng/l | 5.00 | | 88.4 | 77-123 | | | |
| **Matrix Spike (AD03113-MS2)** | | **Source: 20C0962-01** | | | Prepared: 04/01/20 Analyzed: 04/02/20 | | | | | | |
| Mercury | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | ND | 101 | 71-125 | | | |
| **Matrix Spike Dup (AD03113-MSD2)** | | **Source: 20C0962-01** | | | Prepared: 04/01/20 Analyzed: 04/02/20 | | | | | | |
| Mercury | 25.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 103 | 71-125 | 1.29 | 24 | |
| **Reference (AD03113-SRM1)** | | | | | Prepared: 04/01/20 Analyzed: 04/02/20 | | | | | | |
| Mercury | 45.2 | 0.200 | 0.500 | ng/l | 50.0 | | 90.5 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03896 - EPA 1631** | | | | | | | | | | | |
| **Blank (AC03896-BLK1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AC03896-BS1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 4.70 | 0.200 | 0.500 | ng/l | 5.00 | | 94.0 | 77-123 | | | |
| **Matrix Spike (AC03896-MS1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.6 | 71-125 | | | |
| **Matrix Spike (AC03896-MS2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.5 | 71-125 | | | |
| **Matrix Spike Dup (AC03896-MSD1)** | | **Source: 20B2972-01** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.449 | 95.7 | 71-125 | 0.0821 | 24 | |
| **Matrix Spike Dup (AC03896-MSD2)** | | **Source: 20C0730-03** | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.369 | 98.7 | 71-125 | 0.200 | 24 | |
| **Reference (AC03896-SRM1)** | | | | | Prepared: 03/13/20 Analyzed: 03/16/20 | | | | | | |
| Mercury, dissolved | 48.2 | 0.200 | 0.500 | ng/l | 50.0 | | 96.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04399 - General Preparation** | | | | | | | | | | | |
| **Blank (AC04399-BLK1)** | | | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC04399-BS1)** | | | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | | 106 | 85-115 | | | |
| **Duplicate (AC04399-DUP1)** | | **Source: 20C1289-07** | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AC04399-MS1)** | | **Source: 20C1289-07** | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | 0.218 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 109 | 85-115 | | | |
| **Matrix Spike (AC04399-MS2)** | | **Source: 20C1578-01** | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | 0.204 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 102 | 85-115 | | | |
| **Matrix Spike Dup (AC04399-MSD1)** | | **Source: 20C1289-07** | | | Prepared & Analyzed: 03/23/20 | | | | | | |
| Cyanide (total) | 0.215 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 107 | 85-115 | 1.70 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03652 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC03652-BLK1)** | | | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *68.7* | | | *ug/L* | *57.4* | | *120* | *39-120* | | | |
| **LCS (AC03652-BS1)** | | | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Diesel | 1540 | 50 | 250 | ug/L | 2100 | | 73.4 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *51.9* | | | *ug/L* | *57.4* | | *90.3* | *39-120* | | | |
| **LCS (AC03652-BS2)** | | | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Motor Oil | 1650 | 100 | 250 | ug/L | 2010 | | 82.0 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *63.9* | | | *ug/L* | *57.4* | | *111* | *39-120* | | | |
| **LCS Dup (AC03652-BSD1)** | | | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Diesel | 1670 | 50 | 250 | ug/L | 2100 | | 79.3 | 61-120 | 7.75 | 25 | |
| *Surrogate: Tetratetracontane* | *66.4* | | | *ug/L* | *57.4* | | *116* | *39-120* | | | |
| **LCS Dup (AC03652-BSD2)** | | | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Motor Oil | 1720 | 100 | 250 | ug/L | 2010 | | 85.7 | 71-125 | 4.43 | 25 | |
| *Surrogate: Tetratetracontane* | *66.1* | | | *ug/L* | *57.4* | | *115* | *39-120* | | | |
| **Matrix Spike (AC03652-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/11/20 Analyzed: 03/13/20 | | | | | | |
| TPH as Diesel | 1650 | 50 | 250 | ug/L | 2100 | ND | 78.7 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *61.9* | | | *ug/L* | *57.4* | | *108* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04364 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04364-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.8* | *76-129* | | | |
| **LCS (AC04364-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | 194 | 50 | 50 | ug/L | 200 | | 96.9 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *99.0* | *76-129* | | | |
| **LCS Dup (AC04364-BSD1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | 184 | 50 | 50 | ug/L | 200 | | 92.0 | 67-132 | 5.20 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **Matrix Spike (AC04364-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| TPH as Gasoline | 214 | 50 | 50 | ug/L | 200 | ND | 107 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC04364-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| TPH as Gasoline | 214 | 50 | 50 | ug/L | 200 | ND | 107 | 37-156 | 0.106 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03800 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03800-BLK1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC03800-BS1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| Acrolein | 33.0 | 2.0 | 5.0 | ug/L | 50.0 | | 66.1 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| **LCS Dup (AC03800-BSD1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| Acrolein | 36.5 | 2.0 | 5.0 | ug/L | 50.0 | | 73.0 | 60-140 | 9.92 | 25 | |
| *Surrogate: Bromofluorobenzene* | *28.4* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.8* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| **Matrix Spike (AC03800-MS1)** | | **Source: 20C1309-01** | | | Prepared: 03/12/20 Analyzed: 03/13/20 | | | | | | |
| Acrolein | 37.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 74.0 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| **Matrix Spike Dup (AC03800-MSD1)** | | **Source: 20C1309-01** | | | Prepared: 03/12/20 Analyzed: 03/13/20 | | | | | | |
| Acrolein | 38.1 | 2.0 | 5.0 | ug/L | 50.0 | ND | 76.2 | 40-160 | 2.88 | 60 | |
| *Surrogate: Bromofluorobenzene* | *27.2* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03800 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03800-BLK1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC03800-BS1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| 2-Chloroethylvinyl ether | 29.4 | 0.70 | 1.0 | ug/L | 25.0 | | 117 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *26.5* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| **LCS Dup (AC03800-BSD1)** | | | | | Prepared & Analyzed: 03/12/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.5 | 0.70 | 1.0 | ug/L | 25.0 | | 98.1 | 3-225 | 18.0 | 30 | |
| *Surrogate: Bromofluorobenzene* | *28.4* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.8* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| **Matrix Spike (AC03800-MS1)** | | **Source: 20C1309-01** | | | Prepared: 03/12/20 Analyzed: 03/13/20 | | | | | | |
| 2-Chloroethylvinyl ether | 28.7 | 0.70 | 1.0 | ug/L | 25.0 | ND | 115 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| **Matrix Spike Dup (AC03800-MSD1)** | | **Source: 20C1309-01** | | | Prepared: 03/12/20 Analyzed: 03/13/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.6 | 0.70 | 1.0 | ug/L | 25.0 | ND | 98.6 | 3-305 | 15.2 | 71 | |
| *Surrogate: Bromofluorobenzene* | *27.2* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04365-MS1)** | | **Source: 20C1080-02** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 40.0 | ND | | 3-305 | | | QM-05, U |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.6* | | | *ug/L* | *25.0* | | *98.5* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04365-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.8* | | | *ug/L* | *25.0* | | *91.4* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04365-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | | 113 | 60-140 | | | |
| Benzene | 21.7 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 65-135 | | | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 70-130 | | | |
| Chlorobenzene | 20.9 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| Dibromochloromethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | | 115 | 70-135 | | | |
| Chloroethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | | 92.6 | 40-160 | | | |
| Chloroform | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 70-135 | | | |
| Bromodichloromethane | 25.1 | 0.40 | 0.50 | ug/L | 20.0 | | 126 | 65-135 | | | |
| 1,1-Dichloroethane | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| 1,2-Dichloroethane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| 1,1-Dichloroethene | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 50-150 | | | |
| 1,2-Dichloropropane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 35-165 | | | |
| cis-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 25-175 | | | |
| trans-1,3-Dichloropropene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 50-150 | | | |
| Ethylbenzene | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 60-140 | | | |
| Bromomethane | 18.1 | 0.40 | 0.50 | ug/L | 20.0 | | 90.4 | 15-185 | | | |
| Chloromethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 2-205 | | | |
| Methylene chloride | 21.3 | 0.50 | 0.50 | ug/L | 20.0 | | 107 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 21.6 | 0.30 | 0.50 | ug/L | 20.0 | | 108 | 60-140 | | | |
| Tetrachloroethene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | | | |
| Toluene | 23.0 | 0.30 | 0.30 | ug/L | 20.0 | | 115 | 70-130 | | | |
| trans-1,2-Dichloroethene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | | | |
| 1,1,1-Trichloroethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Trichloroethene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| Vinyl chloride | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.10 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC04365-BSD1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | 22.0 | 0.40 | 2.0 | ug/L | 20.0 | | 110 | 60-140 | 2.65 | 25 | |
| Benzene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 65-135 | 5.50 | 25 | |
| Bromoform | 23.9 | 0.30 | 0.50 | ug/L | 20.0 | | 120 | 70-130 | 3.31 | 25 | |
| Carbon tetrachloride | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-130 | 4.76 | 25 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 4.29 | 25 | |
| Dibromochloromethane | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 70-135 | 1.31 | 25 | |
| Chloroethane | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 87.8 | 40-160 | 5.27 | 25 | |
| Chloroform | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-135 | 4.51 | 25 | |
| Bromodichloromethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | | 124 | 65-135 | 0.880 | 25 | |
| 1,1-Dichloroethane | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | 5.48 | 25 | |
| 1,2-Dichloroethane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.1 | 70-130 | 9.99 | 25 | |
| 1,1-Dichloroethene | 18.7 | 0.30 | 0.50 | ug/L | 20.0 | | 93.6 | 50-150 | 12.2 | 25 | |
| 1,2-Dichloropropane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 35-165 | 1.37 | 25 | |
| cis-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 25-175 | 0.146 | 25 | |
| trans-1,3-Dichloropropene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 50-150 | 0.466 | 25 | |
| Ethylbenzene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 60-140 | 4.98 | 25 | |
| Bromomethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.7 | 15-185 | 0.777 | 25 | |
| Chloromethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 94.9 | 2-205 | 10.4 | 25 | |
| Methylene chloride | 20.4 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.41 | 25 | |
| 1,1,2,2-Tetrachloroethane | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 60-140 | 0.696 | 25 | |
| Tetrachloroethene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 70-130 | 6.16 | 25 | |
| Toluene | 22.1 | 0.30 | 0.30 | ug/L | 20.0 | | 110 | 70-130 | 3.91 | 25 | |
| trans-1,2-Dichloroethene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 5.49 | 25 | |
| 1,1,1-Trichloroethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 4.21 | 25 | |
| 1,1,2-Trichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 2.54 | 25 | |
| Trichloroethene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 65-135 | 5.64 | 25 | |
| Vinyl chloride | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 5-195 | 4.54 | 25 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | 2.61 | 25 | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-130 | 2.62 | 25 | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | 2.88 | 25 | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04365-MS1)** | | **Source: 20C1080-02** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | ND | 119 | 40-160 | | | |
| Benzene | 23.7 | 0.30 | 0.30 | ug/L | 20.0 | ND | 119 | 37-151 | | | |
| Bromoform | 23.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 119 | 45-169 | | | |
| Carbon tetrachloride | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | | | |
| Chlorobenzene | 22.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 111 | 37-160 | | | |
| Dibromochloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 53-149 | | | |
| Chloroethane | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.2 | 14-230 | | | |
| Chloroform | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 51-138 | | | |
| Bromodichloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 35-155 | | | |
| 1,1-Dichloroethane | 23.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 59-155 | | | |
| 1,2-Dichloroethane | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 49-155 | | | |
| 1,1-Dichloroethene | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 2-234 | | | |
| 1,2-Dichloropropane | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 17-183 | | | |
| Ethylbenzene | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 37-162 | | | |
| Bromomethane | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.5 | 2-242 | | | |
| Chloromethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 2-273 | | | |
| Methylene chloride | 22.3 | 0.50 | 0.50 | ug/L | 20.0 | ND | 111 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 115 | 46-157 | | | |
| Tetrachloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 64-148 | | | |
| Toluene | 25.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 126 | 47-150 | | | |
| trans-1,2-Dichloroethene | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 54-156 | | | |
| 1,1,1-Trichloroethane | 24.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 124 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | | | |
| Trichloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-157 | | | |
| Vinyl chloride | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 2-251 | | | |
| 1,2-Dichlorobenzene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.6* | | | *ug/L* | *25.0* | | *98.5* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04365-MSD1)** | | **Source: 20C1080-02** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 117 | 40-160 | 1.69 | 60 | |
| Benzene | 23.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 116 | 37-151 | 1.87 | 61 | |
| Bromoform | 24.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 123 | 45-169 | 3.02 | 42 | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | 3.35 | 41 | |
| Chlorobenzene | 22.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 111 | 37-160 | 0.405 | 53 | |
| Dibromochloromethane | 24.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 120 | 53-149 | 1.43 | 50 | |
| Chloroethane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 90.0 | 14-230 | 4.50 | 78 | |
| Chloroform | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 51-138 | 2.04 | 54 | |
| Bromodichloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 35-155 | 0.774 | 56 | |
| 1,1-Dichloroethane | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 115 | 59-155 | 1.43 | 40 | |
| 1,2-Dichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 49-155 | 2.27 | 49 | |
| 1,1-Dichloroethene | 23.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 118 | 2-234 | 0.597 | 32 | |
| 1,2-Dichloropropane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 2-210 | 0.498 | 55 | |
| cis-1,3-Dichloropropene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 2-227 | 2.67 | 58 | |
| trans-1,3-Dichloropropene | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 17-183 | 3.92 | 86 | |
| Ethylbenzene | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 37-162 | 0.480 | 63 | |
| Bromomethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.2 | 2-242 | 0.315 | 61 | |
| Chloromethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 2-273 | 3.99 | 60 | |
| Methylene chloride | 21.8 | 0.50 | 0.50 | ug/L | 20.0 | ND | 109 | 2-221 | 2.41 | 28 | |
| 1,1,2,2-Tetrachloroethane | 22.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 112 | 46-157 | 2.33 | 61 | |
| Tetrachloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 64-148 | 0.130 | 39 | |
| Toluene | 25.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 126 | 47-150 | 0.278 | 41 | |
| trans-1,2-Dichloroethene | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 54-156 | 0.171 | 45 | |
| 1,1,1-Trichloroethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 52-162 | 0.644 | 36 | |
| 1,1,2-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | 0.137 | 45 | |
| Trichloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-157 | 0.00 | 48 | |
| Vinyl chloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 2-251 | 4.08 | 66 | |
| 1,2-Dichlorobenzene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 0.937 | 57 | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 59-156 | 0.269 | 43 | |
| 1,4-Dichlorobenzene | 21.1 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 1.13 | 57 | |
| *Surrogate: Bromofluorobenzene* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03917-BLK1)** | | | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | 0.460 | 0.30 | 2.0 | ug/L | | | | | | | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 1.99 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03917-BLK1)** | | | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *24.2* | | | *ug/L* | *40.0* | | *60.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *16.1* | | | *ug/L* | *40.0* | | *40.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.1* | | | *ug/L* | *40.0* | | *55.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *34.0* | | | *ug/L* | *40.0* | | *85.0* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *11.3* | | | *ug/L* | *40.0* | | *28.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *35.0* | | | *ug/L* | *40.0* | | *87.5* | *4-168* | | | |
| **LCS (AC03917-BS1)** | | | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| 2-Chlorophenol | 24.2 | 0.70 | 5.0 | ug/L | 40.0 | | 60.4 | 36-120 | | | |
| 2,4-Dichlorophenol | 27.1 | 0.70 | 5.0 | ug/L | 40.0 | | 67.6 | 53-122 | | | |
| 2,4-Dimethylphenol | 41.8 | 1.0 | 2.0 | ug/L | 50.0 | | 83.5 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 30.7 | 3.0 | 5.0 | ug/L | 40.0 | | 76.8 | 53-130 | | | |
| 2,4-Dinitrophenol | 29.4 | 5.0 | 5.0 | ug/L | 40.0 | | 73.5 | 10-173 | | | |
| 2-Nitrophenol | 26.4 | 0.90 | 10 | ug/L | 40.0 | | 66.1 | 45-167 | | | |
| 4-Nitrophenol | 15.6 | 3.0 | 10 | ug/L | 40.0 | | 39.1 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 34.9 | 1.0 | 1.0 | ug/L | 40.0 | | 87.3 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 22.3 | 0.60 | 5.0 | ug/L | 40.0 | | 55.8 | 36-102 | | | |
| Pentachlorophenol | 41.5 | 4.0 | 5.0 | ug/L | 40.0 | | 104 | 38-152 | | | |
| Phenol | 14.5 | 0.50 | 1.0 | ug/L | 40.0 | | 36.2 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 31.9 | 0.70 | 10 | ug/L | 40.0 | | 79.7 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 30.1 | 0.90 | 5.0 | ug/L | 40.0 | | 75.2 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 24.5 | 0.90 | 1.0 | ug/L | 40.0 | | 61.3 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 33.3 | 1.0 | 2.0 | ug/L | 40.0 | | 83.2 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 40.1 | 3.0 | 5.0 | ug/L | 40.0 | | 100 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 31.4 | 1.0 | 5.0 | ug/L | 40.0 | | 78.5 | 65-120 | | | |
| Butyl benzyl phthalate | 26.8 | 0.60 | 10 | ug/L | 40.0 | | 67.0 | 2-140 | | | |
| 2-Chloronaphthalene | 42.1 | 0.60 | 10 | ug/L | 40.0 | | 105 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 27.4 | 0.90 | 5.0 | ug/L | 40.0 | | 68.4 | 38-145 | | | |
| 1,3-Dichlorobenzene | 20.2 | 0.60 | 1.0 | ug/L | 40.0 | | 50.5 | 31-92 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.60 | 1.0 | ug/L | 40.0 | | 51.0 | 32-91 | | | |
| 1,2-Dichlorobenzene | 20.8 | 0.60 | 2.0 | ug/L | 40.0 | | 51.9 | 33-93 | | | |
| Diethyl phthalate | 27.7 | 0.30 | 2.0 | ug/L | 40.0 | | 69.2 | 2-120 | | | |
| Dimethyl phthalate | 18.6 | 0.80 | 2.0 | ug/L | 40.0 | | 46.6 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC03917-BS1)** | | | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| Di-n-butyl phthalate | 39.1 | 0.90 | 10 | ug/L | 40.0 | | 97.8 | 8-120 | | | |
| 2,4-Dinitrotoluene | 30.2 | 0.80 | 5.0 | ug/L | 40.0 | | 75.4 | 48-127 | | | |
| 2,6-Dinitrotoluene | 31.2 | 0.80 | 5.0 | ug/L | 40.0 | | 78.1 | 68-137 | | | |
| Di-n-octyl phthalate | 26.0 | 0.60 | 10 | ug/L | 40.0 | | 65.1 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 35.1 | 0.60 | 1.0 | ug/L | 40.0 | | 87.8 | 52-115 | | | |
| Hexachlorobenzene | 33.1 | 0.90 | 1.0 | ug/L | 40.0 | | 82.7 | 8-142 | | | |
| Hexachlorobutadiene | 21.3 | 0.80 | 1.0 | ug/L | 40.0 | | 53.4 | 38-120 | | | |
| Hexachlorocyclopentadiene | 11.5 | 4.0 | 5.0 | ug/L | 40.0 | | 28.8 | 16-93 | | | |
| Hexachloroethane | 42.1 | 0.60 | 1.0 | ug/L | 40.0 | | 105 | 55-120 | | | |
| Isophorone | 31.0 | 0.30 | 1.0 | ug/L | 40.0 | | 77.6 | 47-180 | | | |
| Nitrobenzene | 25.4 | 0.90 | 1.0 | ug/L | 40.0 | | 63.5 | 54-158 | | | |
| N-Nitrosodimethylamine | 22.4 | 0.30 | 5.0 | ug/L | 40.0 | | 55.9 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 28.5 | 0.80 | 5.0 | ug/L | 40.0 | | 71.2 | 14-198 | | | |
| N-Nitrosodiphenylamine | 34.5 | 1.0 | 1.0 | ug/L | 40.0 | | 86.2 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 27.0 | 0.60 | 5.0 | ug/L | 40.0 | | 67.4 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *52.3* | | | *ug/L* | *80.0* | | *65.4* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *36.7* | | | *ug/L* | *80.0* | | *45.8* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *51.3* | | | *ug/L* | *80.0* | | *64.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *71.7* | | | *ug/L* | *80.0* | | *89.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *25.9* | | | *ug/L* | *80.0* | | *32.3* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *80.3* | | | *ug/L* | *80.0* | | *100* | *4-168* | | | |
| **Matrix Spike (AC03917-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| 2-Chlorophenol | 28.7 | 0.70 | 5.0 | ug/L | 40.0 | ND | 71.8 | 23-134 | | | |
| 2,4-Dichlorophenol | 31.7 | 0.70 | 5.0 | ug/L | 40.0 | ND | 79.4 | 39-135 | | | |
| 2,4-Dimethylphenol | 8.99 | 1.0 | 2.0 | ug/L | 50.0 | ND | 18.0 | 32-120 | | | |
| 4,6-Dinitro-2-methylphenol | 39.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 99.0 | 7-181 | | | |
| 2,4-Dinitrophenol | 44.3 | 5.0 | 5.0 | ug/L | 40.0 | ND | 111 | 10-191 | | | |
| 2-Nitrophenol | 35.6 | 0.90 | 10 | ug/L | 40.0 | ND | 89.1 | 29-182 | | | |
| 4-Nitrophenol | 21.2 | 3.0 | 10 | ug/L | 40.0 | ND | 53.1 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 40.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 101 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 24.1 | 0.60 | 5.0 | ug/L | 40.0 | ND | 60.2 | 9-124 | | | |
| Pentachlorophenol | 47.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 120 | 14-176 | | | |
| Phenol | 14.1 | 0.50 | 1.0 | ug/L | 40.0 | ND | 35.2 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 39.1 | 0.70 | 10 | ug/L | 40.0 | ND | 97.7 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 31.5 | 0.90 | 5.0 | ug/L | 40.0 | ND | 78.6 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 27.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 68.6 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC03917-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 27.1 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.7 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 50.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 126 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 35.8 | 1.0 | 5.0 | ug/L | 40.0 | ND | 89.6 | 53-127 | | | |
| Butyl benzyl phthalate | 41.0 | 0.60 | 10 | ug/L | 40.0 | ND | 103 | 2-152 | | | |
| 2-Chloronaphthalene | 25.1 | 0.60 | 10 | ug/L | 40.0 | ND | 62.6 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 35.8 | 0.90 | 5.0 | ug/L | 40.0 | ND | 89.4 | 25-158 | | | |
| 1,3-Dichlorobenzene | 21.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 53.1 | 1-106 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.0 | 3-105 | | | |
| 1,2-Dichlorobenzene | 22.0 | 0.60 | 2.0 | ug/L | 40.0 | ND | 55.0 | 7-104 | | | |
| Diethyl phthalate | 44.3 | 0.30 | 2.0 | ug/L | 40.0 | ND | 111 | 2-120 | | | |
| Dimethyl phthalate | 31.9 | 0.80 | 2.0 | ug/L | 40.0 | ND | 79.7 | 2-120 | | | |
| Di-n-butyl phthalate | 49.7 | 0.90 | 10 | ug/L | 40.0 | 1.58 | 120 | 1-120 | | | |
| 2,4-Dinitrotoluene | 43.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 108 | 39-139 | | | |
| 2,6-Dinitrotoluene | 40.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 102 | 50-158 | | | |
| Di-n-octyl phthalate | 43.8 | 0.60 | 10 | ug/L | 40.0 | ND | 110 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 37.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 94.0 | 39-116 | | | |
| Hexachlorobenzene | 36.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 90.4 | 2-152 | | | |
| Hexachlorobutadiene | 22.5 | 0.80 | 1.0 | ug/L | 40.0 | ND | 56.3 | 24-120 | | | |
| Hexachlorocyclopentadiene | 11.7 | 4.0 | 5.0 | ug/L | 40.0 | ND | 29.2 | 10-93 | | | |
| Hexachloroethane | 21.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 53.8 | 40-120 | | | |
| Isophorone | 35.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 87.7 | 21-196 | | | |
| Nitrobenzene | 28.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 70.0 | 35-180 | | | |
| N-Nitrosodimethylamine | 17.1 | 0.30 | 5.0 | ug/L | 40.0 | ND | 42.8 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 32.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 80.8 | 2-230 | | | |
| N-Nitrosodiphenylamine | 37.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 94.8 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 22.8 | 0.60 | 5.0 | ug/L | 40.0 | ND | 57.1 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *24.9* | | | *ug/L* | *40.0* | | *62.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *16.3* | | | *ug/L* | *40.0* | | *40.8* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.0* | | | *ug/L* | *40.0* | | *70.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.5* | | | *ug/L* | *40.0* | | *96.2* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *11.6* | | | *ug/L* | *40.0* | | *29.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *41.1* | | | *ug/L* | *40.0* | | *103* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03917-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| 2-Chlorophenol | 30.5 | 0.70 | 5.0 | ug/L | 40.0 | ND | 76.3 | 23-134 | 6.04 | 61 | |
| 2,4-Dichlorophenol | 33.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 84.0 | 39-135 | 5.69 | 50 | |
| 2,4-Dimethylphenol | 15.1 | 1.0 | 2.0 | ug/L | 50.0 | ND | 30.2 | 32-120 | 50.7 | 58 | |
| 4,6-Dinitro-2-methylphenol | 44.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 112 | 7-181 | 12.5 | 203 | |
| 2,4-Dinitrophenol | 46.2 | 5.0 | 5.0 | ug/L | 40.0 | ND | 115 | 10-191 | 4.09 | 132 | |
| 2-Nitrophenol | 36.9 | 0.90 | 10 | ug/L | 40.0 | ND | 92.2 | 29-182 | 3.39 | 55 | |
| 4-Nitrophenol | 18.2 | 3.0 | 10 | ug/L | 40.0 | ND | 45.6 | 7-132 | 15.2 | 131 | |
| 4-Chloro-3-methylphenol | 43.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 109 | 22-147 | 6.97 | 73 | |
| Pentachlorophenol | 57.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 142 | 14-176 | 17.3 | 86 | |
| 2-Methylphenol (o-cresol) | 30.4 | 0.60 | 5.0 | ug/L | 40.0 | ND | 76.1 | 9-124 | 23.4 | 28 | |
| Phenol | 16.1 | 0.50 | 1.0 | ug/L | 40.0 | ND | 40.3 | 5-120 | 13.6 | 64 | |
| 2,4,6-Trichlorophenol | 42.3 | 0.70 | 10 | ug/L | 40.0 | ND | 106 | 37-144 | 7.89 | 58 | |
| Bis(2-chloroethoxy)methane | 34.1 | 0.90 | 5.0 | ug/L | 40.0 | ND | 85.2 | 33-184 | 8.02 | 54 | |
| Bis(2-chloroethyl)ether | 32.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 80.6 | 12-158 | 16.0 | 108 | |
| Bis(2-chloroisopropyl)ether | 33.6 | 1.0 | 2.0 | ug/L | 40.0 | ND | 84.0 | 36-166 | 21.5 | 76 | |
| Bis(2-ethylhexyl)phthalate | 51.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 130 | 8-158 | 2.62 | 82 | |
| 4-Bromophenyl phenyl ether | 38.9 | 1.0 | 5.0 | ug/L | 40.0 | ND | 97.3 | 53-127 | 8.24 | 43 | |
| Butyl benzyl phthalate | 34.2 | 0.60 | 10 | ug/L | 40.0 | ND | 85.6 | 2-152 | 18.0 | 60 | |
| 2-Chloronaphthalene | 27.9 | 0.60 | 10 | ug/L | 40.0 | ND | 69.8 | 60-120 | 10.8 | 24 | |
| 4-Chlorophenyl phenyl ether | 33.3 | 0.90 | 5.0 | ug/L | 40.0 | ND | 83.2 | 25-158 | 7.15 | 61 | |
| 1,4-Dichlorobenzene | 22.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 57.0 | 3-105 | 11.1 | 42 | |
| 1,3-Dichlorobenzene | 22.7 | 0.60 | 1.0 | ug/L | 40.0 | ND | 56.8 | 1-106 | 6.69 | 41 | |
| 1,2-Dichlorobenzene | 24.1 | 0.60 | 2.0 | ug/L | 40.0 | ND | 60.4 | 7-104 | 9.32 | 41 | |
| Diethyl phthalate | 33.7 | 0.30 | 2.0 | ug/L | 40.0 | ND | 84.2 | 2-120 | 27.3 | 100 | |
| Dimethyl phthalate | 24.7 | 0.80 | 2.0 | ug/L | 40.0 | ND | 61.7 | 2-120 | 25.5 | 183 | |
| Di-n-butyl phthalate | 44.6 | 0.90 | 10 | ug/L | 40.0 | 1.58 | 108 | 1-120 | 10.8 | 47 | |
| 2,4-Dinitrotoluene | 38.8 | 0.80 | 5.0 | ug/L | 40.0 | ND | 96.9 | 39-139 | 10.3 | 42 | |
| 2,6-Dinitrotoluene | 40.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 101 | 50-158 | 1.55 | 48 | |
| Di-n-octyl phthalate | 35.2 | 0.60 | 10 | ug/L | 40.0 | ND | 88.0 | 4-146 | 21.8 | 69 | |
| 1,2-Diphenylhydrazine | 42.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 106 | 39-116 | 12.2 | 25 | |
| Hexachlorobenzene | 38.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 96.7 | 2-152 | 6.68 | 55 | |
| Hexachlorobutadiene | 22.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 56.8 | 24-120 | 0.929 | 62 | |
| Hexachlorocyclopentadiene | 13.4 | 4.0 | 5.0 | ug/L | 40.0 | ND | 33.6 | 10-93 | 14.0 | 55 | |
| Hexachloroethane | 23.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 58.5 | 40-120 | 8.46 | 52 | |
| Isophorone | 38.4 | 0.30 | 1.0 | ug/L | 40.0 | ND | 96.0 | 21-196 | 9.04 | 93 | |
| Nitrobenzene | 28.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 70.4 | 35-180 | 0.641 | 62 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03917 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC03917-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/23/20 | | | | | | |
| N-Nitrosodimethylamine | 17.0 | 0.30 | 5.0 | ug/L | 40.0 | ND | 42.4 | 10-84 | 0.998 | 59 | |
| N-Nitrosodi-n-propylamine | 43.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 108 | 2-230 | 29.2 | 87 | |
| N-Nitrosodiphenylamine | 41.4 | 1.0 | 1.0 | ug/L | 40.0 | ND | 103 | 40-115 | 8.71 | 25 | |
| 1,2,4-Trichlorobenzene | 22.6 | 0.60 | 5.0 | ug/L | 40.0 | ND | 56.6 | 44-142 | 0.879 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *27.3* | | | *ug/L* | *40.0* | | *68.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *16.2* | | | *ug/L* | *40.0* | | *40.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *26.2* | | | *ug/L* | *40.0* | | *65.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.4* | | | *ug/L* | *40.0* | | *93.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *12.7* | | | *ug/L* | *40.0* | | *31.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *46.7* | | | *ug/L* | *40.0* | | *117* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC03947 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC03947-BLK1)** | | | | | Prepared: 03/16/20 Analyzed: 03/30/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *29.0* | | | *ug/L* | *40.0* | | *72.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.0* | | | *ug/L* | *40.0* | | *70.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.6* | | | *ug/L* | *40.0* | | *81.4* | *36-141* | | | |
| **LCS (AC03947-BS1)** | | | | | Prepared: 03/16/20 Analyzed: 03/30/20 | | | | | | |
| Benzidine | 10.6 | 3.00 | 5.00 | ug/L | 79.4 | | 13.3 | 12-151 | | | |
| 3,3′-Dichlorobenzidine | 45.8 | 2.00 | 5.00 | ug/L | 79.4 | | 57.7 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *21.9* | | | *ug/L* | *40.0* | | *54.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.2* | | | *ug/L* | *40.0* | | *55.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.4* | | | *ug/L* | *40.0* | | *66.1* | *36-141* | | | |
| **Matrix Spike (AC03947-MS1)** | | **Source: 20C1080-03** | | | Prepared: 03/16/20 Analyzed: 03/30/20 | | | | | | |
| Benzidine | 9.71 | 3.00 | 5.00 | ug/L | 79.4 | ND | 12.2 | 4-262 | | | |
| 3,3′-Dichlorobenzidine | 53.1 | 2.00 | 5.00 | ug/L | 79.4 | ND | 66.9 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *30.1* | | | *ug/L* | *40.0* | | *75.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.6* | | | *ug/L* | *40.0* | | *76.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.4* | | | *ug/L* | *40.0* | | *73.5* | *36-141* | | | |
| **Matrix Spike Dup (AC03947-MSD1)** | | **Source: 20C1080-03** | | | Prepared: 03/16/20 Analyzed: 03/30/20 | | | | | | |
| Benzidine | 9.90 | 3.00 | 5.00 | ug/L | 79.4 | ND | 12.5 | 4-262 | 1.94 | 108 | |
| 3,3′-Dichlorobenzidine | 53.5 | 2.00 | 5.00 | ug/L | 79.4 | ND | 67.4 | 4-262 | 0.675 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *30.8* | | | *ug/L* | *40.0* | | *77.0* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.5* | | | *ug/L* | *40.0* | | *76.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.7* | | | *ug/L* | *40.0* | | *71.8* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04575 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04575-BLK1)** | | | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *22.2* | | | *ug/L* | *40.0* | | *55.6* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *23.2* | | | *ug/L* | *40.0* | | *58.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.6* | | | *ug/L* | *40.0* | | *89.0* | *37-139* | | | |
| **LCS (AC04575-BS1)** | | | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Acenaphthene | 27.3 | 0.20 | 0.20 | ug/L | 40.0 | | 68.2 | 60-132 | | | |
| Acenaphthylene | 29.4 | 0.20 | 0.20 | ug/L | 40.0 | | 73.4 | 54-126 | | | |
| Anthracene | 36.0 | 0.090 | 0.20 | ug/L | 40.0 | | 90.0 | 43-120 | | | |
| Benzo (a) anthracene | 33.6 | 0.20 | 0.20 | ug/L | 40.0 | | 84.1 | 42-133 | | | |
| Benzo (a) pyrene | 35.4 | 0.20 | 0.20 | ug/L | 40.0 | | 88.6 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | | 92.3 | 42-140 | | | |
| Benzo (g,h,i) perylene | 39.0 | 0.10 | 0.20 | ug/L | 40.0 | | 97.6 | 2-195 | | | |
| Benzo (k) fluoranthene | 37.8 | 0.20 | 0.20 | ug/L | 40.0 | | 94.5 | 25-146 | | | |
| Chrysene | 34.8 | 0.20 | 0.20 | ug/L | 40.0 | | 86.9 | 44-140 | | | |
| Dibenz (a,h) anthracene | 38.9 | 0.10 | 0.20 | ug/L | 40.0 | | 97.4 | 2-200 | | | |
| Fluoranthene | 36.8 | 0.070 | 0.20 | ug/L | 40.0 | | 92.1 | 43-121 | | | |
| Fluorene | 30.2 | 0.20 | 0.20 | ug/L | 40.0 | | 75.5 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 38.2 | 0.030 | 0.20 | ug/L | 40.0 | | 95.6 | 2-151 | | | |
| Naphthalene | 27.6 | 0.090 | 0.20 | ug/L | 40.0 | | 69.0 | 36-120 | | | |
| Phenanthrene | 31.1 | 0.10 | 0.20 | ug/L | 40.0 | | 77.6 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04575 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04575-BS1)** | | | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Pyrene | 33.8 | 0.20 | 0.20 | ug/L | 40.0 | | 84.4 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *55.1* | | | *ug/L* | *80.0* | | *68.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *56.7* | | | *ug/L* | *80.0* | | *70.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *70.4* | | | *ug/L* | *80.0* | | *87.9* | *37-139* | | | |
| **Matrix Spike (AC04575-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Acenaphthene | 30.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 77.1 | 47-145 | | | |
| Acenaphthylene | 32.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 80.0 | 33-145 | | | |
| Anthracene | 39.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 98.4 | 27-133 | | | |
| Benzo (a) anthracene | 37.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.9 | 33-143 | | | |
| Benzo (a) pyrene | 40.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 102 | 17-163 | | | |
| Benzo (b) fluoranthene | 38.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.4 | 24-159 | | | |
| Benzo (g,h,i) perylene | 45.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 115 | 2-219 | | | |
| Benzo (k) fluoranthene | 40.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 102 | 11-162 | | | |
| Chrysene | 38.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 95.2 | 17-168 | | | |
| Dibenz (a,h) anthracene | 51.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 128 | 2-227 | | | |
| Fluoranthene | 44.5 | 0.070 | 0.20 | ug/L | 40.0 | ND | 111 | 26-137 | | | |
| Fluorene | 37.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 94.3 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 48.9 | 0.030 | 0.20 | ug/L | 40.0 | ND | 122 | 2-171 | | | |
| Naphthalene | 21.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 52.4 | 21-133 | | | |
| Phenanthrene | 39.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 98.4 | 54-120 | | | |
| Pyrene | 39.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 98.3 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *27.2* | | | *ug/L* | *40.0* | | *67.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *25.9* | | | *ug/L* | *40.0* | | *64.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.0* | | | *ug/L* | *40.0* | | *97.6* | *37-139* | | | |
| **Matrix Spike Dup (AC04575-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Acenaphthene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.4 | 47-145 | 5.52 | 48 | |
| Acenaphthylene | 33.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.6 | 33-145 | 3.29 | 74 | |
| Anthracene | 43.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 108 | 27-133 | 9.64 | 66 | |
| Benzo (a) anthracene | 38.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.2 | 33-143 | 2.34 | 53 | |
| Benzo (a) pyrene | 37.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.6 | 17-163 | 9.69 | 72 | |
| Benzo (b) fluoranthene | 36.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 91.8 | 24-159 | 4.89 | 71 | |
| Benzo (g,h,i) perylene | 43.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 109 | 2-219 | 5.07 | 97 | |
| Benzo (k) fluoranthene | 38.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.4 | 11-162 | 4.49 | 63 | |
| Chrysene | 38.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.2 | 17-168 | 1.04 | 87 | |
| Dibenz (a,h) anthracene | 45.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 114 | 2-227 | 11.5 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/03/20 11:24 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04575 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04575-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/16/20 Analyzed: 03/24/20 | | | | | | |
| Fluoranthene | 51.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 129 | 26-137 | 14.8 | 66 | |
| Fluorene | 40.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 100 | 59-121 | 5.87 | 38 | |
| Indeno (1,2,3-cd) pyrene | 44.4 | 0.030 | 0.20 | ug/L | 40.0 | ND | 111 | 2-171 | 9.58 | 99 | |
| Naphthalene | 24.8 | 0.090 | 0.20 | ug/L | 40.0 | ND | 62.1 | 21-133 | 17.0 | 65 | |
| Phenanthrene | 38.5 | 0.10 | 0.20 | ug/L | 40.0 | ND | 96.2 | 54-120 | 2.26 | 39 | |
| Pyrene | 39.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 99.0 | 52-120 | 0.710 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *25.8* | | | *ug/L* | *40.0* | | *64.5* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.9* | | | *ug/L* | *40.0* | | *82.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.0* | | | *ug/L* | *40.0* | | *92.5* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/03/20 11:24 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-01 | The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
9[illegible]6-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. 20C1080



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

1.8°C Ukiah

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter David C Walt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-6 | 3-9-2020 | 1455 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | ~~3-9-20~~ | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Lab Approval Required For Rush

TAT: 24 hr ○ 48 hr ○ Lab Approval Required 1 wk ○ 2 wk (standard) ⊕

| | | | |
|---|---|---|---|
| Relinquished by: David C Walt | Received by: [signature] | Date: 3/9/20 | Time: 1610 |
| Relinquished by: [signature] | Received by: [signature] | Date: 3-9-20 | Time: 19:57 |
| Relinquished by: [signature] | Received by: [signature] | Date: 3-9-20 | Time: 22:30 |
| Relinquished by: | Received by: | Date: | Time: |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (x) No ( )

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
91[illegible]5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No._____ 

| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | Project No: Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | Site Contact: David Walter |

Signature below authorizes work under terms stated on reverse side.

1.8°C Ukiah

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter - David C Walt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | Date | Time | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | 3-9-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | 3-9-2020 | 1110 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-9-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TAT: 24 hr ○ 48 hr ○ (Lab Approval Required) 1 wk ○ 2 wk (standard) ⊘ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/9/20 | 1616 |
| | | 3-9-20 | 19:57 |
| | | 3-9-20 | 22:30 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

# 20C1080

## Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 03/24/20 15:00 (10 day TAT)
Received By: Pete L. Hathaway
Logged In By: Sean Foley
Date Received: 03/09/20 22:30
Date Logged In: 03/10/20 08:03

Samples Received at: _____ deg C

All containers intact: YES NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C1080-01 EMSA-DMW-6 [Water] Sampled 03/09/20 14:55 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 14:55 | | |
| **20C1080-01 EMSA-DMW-6 [Water] Sampled 03/09/20 14:55 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 14:55 | | |
| **20C1080-02 WMSA-DMW-2 [Water] Sampled 03/09/20 13:00 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 13:00 | | |
| **20C1080-02 WMSA-DMW-2 [Water] Sampled 03/09/20 13:00 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 13:00 | | |
| **20C1080-03 WMSA-DMW-6 [Water] Sampled 03/09/20 11:10 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 11:10 | | |
| **20C1080-03 WMSA-DMW-6 [Water] Sampled 03/09/20 11:10 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 11:10 | | |

| | | | | | |
|---|---|---|---|---|---|
| [signature] | 3-10-20 | | [signature] | 3/11/20 | 8:00 |
| Relinquished By | Date | Time | Received By | Date | Time |
| Relinquished By | Date | Time | Received By | Date | Time |

**WORK ORDER**

**20C1080**



**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | | | |
|---|---|---|---|
| **Client:** | **Golder Associates - Sunnyvale** | **Project Manager:** | **Robbie C. Phillips** |
| **Project:** | **EMSA/WMSA Sampling** | **Project Number:** | **Ground Water** |

| | | | |
|---|---|---|---|
| Date Due: | 03/24/20 15:00 (10 day TAT) | | |
| Received By: | Pete L. Hathaway | Date Received: | 03/09/20 22:30 |
| Logged In By: | Sean Foley | Date Logged In: | 03/10/20 08:03 |

Samples Received at: 19.4 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C1080-01 EMSA-DMW-6 [Water] Sampled 03/09/20 14:55 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 14:55 | | |
| **20C1080-01 EMSA-DMW-6 [Water] Sampled 03/09/20 14:55 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 14:55 | | |
| **20C1080-02 WMSA-DMW-2 [Water] Sampled 03/09/20 13:00 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 13:00 | | |
| **20C1080-02 WMSA-DMW-2 [Water] Sampled 03/09/20 13:00 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 13:00 | | |
| **20C1080-03 WMSA-DMW-6 [Water] Sampled 03/09/20 11:10 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/06/20 11:10 | | |
| **20C1080-03 WMSA-DMW-6 [Water] Sampled 03/09/20 11:10 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/06/20 11:10 | | |

| | | | | | |
|---|---|---|---|---|---|
| | 3/11/20 | | | 3-11-20 | 13:50 |
| Relinquished By | Date | Time | Received By | Date | Time |
| | 3-11-20 | | AC | 03/13/20 | 1620 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C2038

Enclosed are the results of analyses for samples received by the laboratory on 03/16/20 21:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 08:46 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-5 | 20C2038-01 | Water | 03/16/20 12:15 | 03/16/20 21:17 |
| Blank - Ground Water | 20C2038-02 | Water | 03/16/20 00:00 | 03/16/20 21:17 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04293 | 03/19/20 22:14 | 03/19/20 22:14 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04600 | 03/25/20 08:20 | 03/28/20 11:40 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **3.3** | **3.0** | **5.0** | **ug/L** | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, J |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04600 | 03/25/20 08:20 | 03/28/20 11:40 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04600 | 03/25/20 08:20 | 03/28/20 11:40 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04600 | 03/25/20 08:20 | 03/28/20 10:07 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water** | **Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/20/20 22:50 | 03/20/20 22:50 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **4.0** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 15:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:44 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water** | **Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | |
| **Mercury** | **0.602** | **0.200** | **0.500** | **ng/l** | 1 | AD03177 | 04/02/20 17:00 | 04/03/20 15:40 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 15:54 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water** | **Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | |
| **Cyanide (total)** | **0.0039** | **0.0020** | **0.0030** | **mg/L** | 1 | AC04736 | 03/26/20 08:30 | 03/26/20 13:45 | 10-204-00-1X | EV | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/30/20 23:11 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/30/20 23:11 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *116 %* | *39-120* | | | *AC04350* | *03/23/20 08:00* | *03/30/20 23:11* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC04364 | 03/21/20 12:00 | 03/22/20 01:04 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *102 %* | *76-129* | | | *AC04364* | *03/21/20 12:00* | *03/22/20 01:04* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 18:12 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *93.6 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water** | **Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 18:12 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *93.6 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 18:12* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *96.6 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:04* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C2038-02) Water Sampled: 03/16/20 00:00 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC04365 | 03/21/20 12:00 | 03/22/20 01:36 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *104 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:36* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *93.5 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:36* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04365* | *03/21/20 12:00* | *03/22/20 01:36* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.60** | **0.30** | **2.0** | **ug/L** | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.8** | **0.90** | **10** | **ug/L** | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04117 | 03/18/20 08:00 | 03/26/20 02:42 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *59.6 %* | *27-119* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *32.7 %* | *7-85* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *60.2 %* | *15-314* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *113 %* | *36-141* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *19.2 %* | *1-65* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *58.9 %* | *4-168* | | | *AC04117* | *03/18/20 08:00* | *03/26/20 02:42* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 02:08 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 02:08 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *75.8 %* | *27-119* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 02:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *77.5 %* | *15-314* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 02:08* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *105 %* | *36-141* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 02:08* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-5 (20C2038-01) Water Sampled: 03/16/20 12:15 Received: 03/16/20 21:17** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AC04792 | 03/18/20 08:00 | 03/27/20 22:36 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *79.9 %* | *24-119* | | | *AC04792* | *03/18/20 08:00* | *03/27/20 22:36* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *78.2 %* | *15-314* | | | *AC04792* | *03/18/20 08:00* | *03/27/20 22:36* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *124 %* | *37-139* | | | *AC04792* | *03/18/20 08:00* | *03/27/20 22:36* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04293 - General Prep** | | | | | | | | | | | |
| **Blank (AC04293-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04293-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.77 | 0.30 | 1.0 | ug/L | 10.0 | | 97.7 | 90-110 | | | |
| **Duplicate (AC04293-DUP1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 0.435 | 0.30 | 1.0 | ug/L | | 0.406 | | | 6.90 | 20 | J |
| **Matrix Spike (AC04293-MS1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.82 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 94.2 | 90-110 | | | |
| **Matrix Spike (AC04293-MS2)** | | **Source: 20C2038-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04293-MSD1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 10.0 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 96.4 | 90-110 | 2.22 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04600 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC04600-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | 0.0891 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04600-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | 21.4 | 0.20 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Arsenic | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Beryllium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium | 21.3 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.3 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead | 21.2 | 0.060 | 0.25 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Nickel | 20.0 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Selenium | 22.1 | 0.30 | 2.0 | ug/L | 20.0 | | 111 | 85-115 | | | |
| Silver | 21.0 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Thallium | 21.0 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Zinc | 105 | 4.0 | 5.0 | ug/L | 100 | | 105 | 85-115 | | | |
| **Duplicate (AC04600-DUP1)** | | **Source: 20C2135-02** | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | 0.392 | 0.20 | 0.50 | ug/L | | 0.382 | | | 2.69 | 20 | J |
| Arsenic | 2.47 | 0.40 | 0.50 | ug/L | | 2.48 | | | 0.519 | 20 | |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | 0.0616 | | | 200 | 20 | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper | 2.62 | 0.40 | 0.50 | ug/L | | 2.52 | | | 3.85 | 20 | |
| Lead | 0.109 | 0.060 | 0.25 | ug/L | | 0.109 | | | 0.793 | 20 | J |
| Nickel | 2.69 | 0.30 | 0.50 | ug/L | | 2.70 | | | 0.470 | 20 | |
| Selenium | 0.460 | 0.30 | 2.0 | ug/L | | 0.500 | | | 8.39 | 20 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04600 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC04600-DUP1)** | | **Source: 20C2135-02** | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Silver | 0.0713 | 0.050 | 0.10 | ug/L | | ND | | | 200 | 20 | J |
| Thallium | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc | 42.4 | 4.0 | 5.0 | ug/L | | 43.0 | | | 1.25 | 20 | |
| **MRL Check (AC04600-MRL1)** | | | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Chromium | 2.05 | 0.50 | 0.50 | ug/L | 0.800 | | 256 | 0-200 | | | |
| **Matrix Spike (AC04600-MS1)** | | **Source: 20C2135-02** | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | 22.5 | 0.20 | 0.50 | ug/L | 20.0 | 0.382 | 110 | 70-130 | | | |
| Arsenic | 24.7 | 0.40 | 0.50 | ug/L | 20.0 | 2.48 | 111 | 70-130 | | | |
| Beryllium | 21.0 | 0.050 | 0.10 | ug/L | 20.0 | 0.0616 | 105 | 70-130 | | | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 19.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 97.9 | 70-130 | | | |
| Copper | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | 2.52 | 102 | 70-130 | | | |
| Lead | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | 0.109 | 102 | 70-130 | | | |
| Nickel | 21.1 | 0.30 | 0.50 | ug/L | 20.0 | 2.70 | 91.8 | 70-130 | | | |
| Selenium | 21.3 | 0.30 | 2.0 | ug/L | 20.0 | 0.500 | 104 | 70-130 | | | |
| Silver | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Zinc | 140 | 4.0 | 5.0 | ug/L | 100 | 43.0 | 97.1 | 70-130 | | | |
| **Matrix Spike (AC04600-MS2)** | | **Source: 20C2098-02** | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | 21.3 | 0.80 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Arsenic | 22.6 | 1.6 | 2.0 | ug/L | 20.0 | ND | 113 | 70-130 | | | |
| Beryllium | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | 0.258 | 103 | 70-130 | | | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 19.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 96.5 | 70-130 | | | |
| Copper | 21.9 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Lead | 20.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Nickel | 20.8 | 1.2 | 2.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Selenium | 22.5 | 1.2 | 8.0 | ug/L | 20.0 | 1.60 | 105 | 70-130 | | | |
| Silver | 21.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Thallium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Zinc | 101 | 16 | 20 | ug/L | 100 | ND | 101 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04600 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04600-MSD1)** | | **Source: 20C2135-02** | | | Prepared: 03/25/20 Analyzed: 03/28/20 | | | | | | |
| Antimony | 22.4 | 0.20 | 0.50 | ug/L | 20.0 | 0.382 | 110 | 70-130 | 0.221 | 20 | |
| Arsenic | 24.7 | 0.40 | 0.50 | ug/L | 20.0 | 2.48 | 111 | 70-130 | 0.0780 | 20 | |
| Beryllium | 20.8 | 0.050 | 0.10 | ug/L | 20.0 | 0.0616 | 104 | 70-130 | 0.946 | 20 | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 0.102 | 20 | |
| Chromium | 19.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 97.8 | 70-130 | 0.0862 | 20 | |
| Copper | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | 2.52 | 103 | 70-130 | 1.03 | 20 | |
| Lead | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | 0.109 | 101 | 70-130 | 0.677 | 20 | |
| Nickel | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | 2.70 | 92.5 | 70-130 | 0.652 | 20 | |
| Selenium | 21.6 | 0.30 | 2.0 | ug/L | 20.0 | 0.500 | 106 | 70-130 | 1.67 | 20 | |
| Silver | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 0.453 | 20 | |
| Thallium | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | 0.0730 | 20 | |
| Zinc | 140 | 4.0 | 5.0 | ug/L | 100 | 43.0 | 96.6 | 70-130 | 0.362 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04356 - General Prep** | | | | | | | | | | | |
| **Blank (AC04356-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04356-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | | 98.0 | 90-110 | | | |
| **Duplicate (AC04356-DUP1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04356-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.9 | 90-110 | | | |
| **Matrix Spike (AC04356-MS2)** | | **Source: 20C2474-04** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.9 | 0.30 | 1.0 | ug/L | 10.0 | 1.20 | 97.3 | 90-110 | | | |
| **Matrix Spike Dup (AC04356-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 1.83 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04255-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | 0.474 | 0.40 | 0.50 | ug/L | | | | | | | J |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0706 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04255-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.0 | 0.20 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Arsenic, dissolved | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Beryllium, dissolved | 20.9 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 20.4 | 0.060 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Chromium, dissolved | 21.3 | 0.50 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Copper, dissolved | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 85-115 | | | |
| Lead, dissolved | 20.6 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Selenium, dissolved | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 98.2 | 4.0 | 5.0 | ug/L | 100 | | 98.2 | 85-115 | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 4.09 | 3.0 | 5.0 | ug/L | | 4.04 | | | 1.09 | 20 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/31/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC04255-MRL1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 0.864 | 0.20 | 0.50 | ug/L | 0.800 | | 108 | 0-200 | | | |
| Arsenic, dissolved | 0.737 | 0.40 | 0.50 | ug/L | 0.800 | | 92.1 | 0-200 | | | |
| Beryllium, dissolved | 0.170 | 0.050 | 0.10 | ug/L | 0.160 | | 106 | 0-200 | | | |
| Cadmium, dissolved | 0.159 | 0.060 | 0.10 | ug/L | 0.160 | | 99.1 | 0-200 | | | |
| Chromium, dissolved | 1.02 | 0.50 | 0.50 | ug/L | 0.800 | | 128 | 0-200 | | | |
| Copper, dissolved | 1.19 | 0.40 | 0.50 | ug/L | 0.800 | | 148 | 0-200 | | | |
| Lead, dissolved | 0.418 | 0.060 | 0.25 | ug/L | 0.400 | | 104 | 0-200 | | | |
| Nickel, dissolved | 0.835 | 0.30 | 0.50 | ug/L | 0.800 | | 104 | 0-200 | | | |
| Selenium, dissolved | 0.754 | 0.30 | 2.0 | ug/L | 0.800 | | 94.3 | 0-200 | | | J |
| Silver, dissolved | 0.188 | 0.050 | 0.10 | ug/L | 0.160 | | 117 | 0-200 | | | |
| Thallium, dissolved | 0.162 | 0.050 | 0.10 | ug/L | 0.160 | | 101 | 0-200 | | | |
| Zinc, dissolved | 7.69 | 4.0 | 5.0 | ug/L | 8.00 | | 96.1 | 0-200 | | | |
| **Matrix Spike (AC04255-MS1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.1 | 2.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Arsenic, dissolved | 22.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 114 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 23.3 | 0.12 | 0.20 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Chromium, dissolved | 20.3 | 5.0 | 5.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 19.8 | 0.60 | 2.5 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Nickel, dissolved | 24.3 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 101 | 70-130 | | | |
| Selenium, dissolved | 22.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Silver, dissolved | 22.5 | 0.10 | 0.20 | ug/L | 20.0 | ND | 113 | 70-130 | | | |
| Thallium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.1 | 70-130 | | | |
| Zinc, dissolved | 99.3 | 40 | 50 | ug/L | 100 | ND | 99.3 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AC04255-MS2)** | | **Source: 20C2261-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 20.7 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 23.1 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 18.7 | 0.12 | 0.20 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Chromium, dissolved | 16.2 | 5.0 | 5.0 | ug/L | 20.0 | ND | 80.9 | 70-130 | | | |
| Copper, dissolved | 20.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Lead, dissolved | 19.6 | 0.60 | 2.5 | ug/L | 20.0 | ND | 97.9 | 70-130 | | | |
| Nickel, dissolved | 29.9 | 3.0 | 5.0 | ug/L | 20.0 | 10.3 | 97.9 | 70-130 | | | |
| Selenium, dissolved | 19.1 | 0.60 | 4.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.6 | 70-130 | | | |
| Thallium, dissolved | 19.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.3 | 70-130 | | | |
| Zinc, dissolved | 99.1 | 40 | 50 | ug/L | 100 | ND | 99.1 | 70-130 | | | |
| **Matrix Spike Dup (AC04255-MSD1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.3 | 2.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 0.798 | 20 | |
| Arsenic, dissolved | 23.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | 2.03 | 20 | |
| Beryllium, dissolved | 21.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 105 | 70-130 | 2.14 | 20 | |
| Cadmium, dissolved | 19.2 | 0.12 | 0.20 | ug/L | 20.0 | ND | 96.2 | 70-130 | 18.9 | 20 | |
| Chromium, dissolved | 22.0 | 5.0 | 5.0 | ug/L | 20.0 | ND | 110 | 70-130 | 7.84 | 20 | |
| Copper, dissolved | 20.6 | 4.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 3.17 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.66 | 20 | |
| Nickel, dissolved | 24.5 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 102 | 70-130 | 0.565 | 20 | |
| Selenium, dissolved | 19.7 | 0.60 | 4.0 | ug/L | 20.0 | ND | 98.6 | 70-130 | 12.5 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 93.1 | 70-130 | 18.8 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 2.99 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 1.56 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03177 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03177-BLK1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03177-BS1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 4.63 | 0.200 | 0.500 | ng/l | 5.00 | | 92.6 | 77-123 | | | |
| **Matrix Spike (AD03177-MS1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 24.5 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 92.4 | 71-125 | | | |
| **Matrix Spike (AD03177-MS2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 91.7 | 71-125 | | | |
| **Matrix Spike Dup (AD03177-MSD1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.1 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 86.7 | 71-125 | 5.97 | 24 | |
| **Matrix Spike Dup (AD03177-MSD2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 90.9 | 71-125 | 0.907 | 24 | |
| **Reference (AD03177-SRM1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 46.1 | 0.200 | 0.500 | ng/l | 50.0 | | 92.2 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Reference (AD03694-SRM1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 46.7 | 0.200 | 0.500 | ng/l | 50.0 | | 93.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04736 - General Preparation** | | | | | | | | | | | |
| **Blank (AC04736-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC04736-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | | 106 | 85-115 | | | |
| **Duplicate (AC04736-DUP1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | 0.00223 | | | 200 | 25 | U |
| **Matrix Spike (AC04736-MS1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.209 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00223 | 103 | 85-115 | | | |
| **Matrix Spike (AC04736-MS2)** | | **Source: 20C2318-01** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.222 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 111 | 85-115 | | | |
| **Matrix Spike Dup (AC04736-MSD1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.211 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00223 | 105 | 85-115 | 1.30 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04350 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04350-BLK1)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *67.7* | | | *ug/L* | *57.4* | | *118* | *39-120* | | | |
| **LCS (AC04350-BS1)** | | | | | Prepared: 03/23/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1310 | 50 | 250 | ug/L | 2100 | | 62.4 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *43.4* | | | *ug/L* | *57.4* | | *75.6* | *39-120* | | | |
| **LCS (AC04350-BS2)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Motor Oil | 1500 | 100 | 250 | ug/L | 2010 | | 74.6 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *53.7* | | | *ug/L* | *57.4* | | *93.6* | *39-120* | | | |
| **LCS Dup (AC04350-BSD1)** | | | | | Prepared: 03/23/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1610 | 50 | 250 | ug/L | 2100 | | 76.8 | 61-120 | 20.8 | 25 | |
| *Surrogate: Tetratetracontane* | *44.2* | | | *ug/L* | *57.4* | | *77.0* | *39-120* | | | |
| **LCS Dup (AC04350-BSD2)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Motor Oil | 1520 | 100 | 250 | ug/L | 2010 | | 75.8 | 71-125 | 1.51 | 25 | |
| *Surrogate: Tetratetracontane* | *65.3* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04364 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04364-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.8* | *76-129* | | | |
| **LCS (AC04364-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | 194 | 50 | 50 | ug/L | 200 | | 96.9 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *99.0* | *76-129* | | | |
| **LCS Dup (AC04364-BSD1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| TPH as Gasoline | 184 | 50 | 50 | ug/L | 200 | | 92.0 | 67-132 | 5.20 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **Matrix Spike (AC04364-MS1)** | | **Source: 20C1080-01** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| TPH as Gasoline | 214 | 50 | 50 | ug/L | 200 | ND | 107 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC04364-MSD1)** | | **Source: 20C1080-01** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| TPH as Gasoline | 214 | 50 | 50 | ug/L | 200 | ND | 107 | 37-156 | 0.106 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 64.2 | 2.0 | 5.0 | ug/L | 50.0 | | 128 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 68.3 | 2.0 | 5.0 | ug/L | 50.0 | | 137 | 60-140 | 6.22 | 25 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 53.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 107 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 63.3 | 2.0 | 5.0 | ug/L | 50.0 | ND | 127 | 40-160 | 16.8 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.5 | 0.70 | 1.0 | ug/L | 25.0 | | 110 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.7 | 3-225 | 11.7 | 30 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 29.8 | 0.70 | 1.0 | ug/L | 25.0 | ND | 119 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 110 | 3-305 | 8.39 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04365-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *22.8* | | | *ug/L* | *25.0* | | *91.4* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04365-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | | 113 | 60-140 | | | |
| Benzene | 21.7 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 65-135 | | | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 70-130 | | | |
| Chlorobenzene | 20.9 | 0.30 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| Dibromochloromethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | | 115 | 70-135 | | | |
| Chloroethane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | | 92.6 | 40-160 | | | |
| Chloroform | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 70-135 | | | |
| Bromodichloromethane | 25.1 | 0.40 | 0.50 | ug/L | 20.0 | | 126 | 65-135 | | | |
| 1,1-Dichloroethane | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| 1,2-Dichloroethane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| 1,1-Dichloroethene | 21.2 | 0.30 | 0.50 | ug/L | 20.0 | | 106 | 50-150 | | | |
| 1,2-Dichloropropane | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 35-165 | | | |
| cis-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 25-175 | | | |
| trans-1,3-Dichloropropene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 50-150 | | | |
| Ethylbenzene | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 60-140 | | | |
| Bromomethane | 18.1 | 0.40 | 0.50 | ug/L | 20.0 | | 90.4 | 15-185 | | | |
| Chloromethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 2-205 | | | |
| Methylene chloride | 21.3 | 0.50 | 0.50 | ug/L | 20.0 | | 107 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 21.6 | 0.30 | 0.50 | ug/L | 20.0 | | 108 | 60-140 | | | |
| Tetrachloroethene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | | | |
| Toluene | 23.0 | 0.30 | 0.30 | ug/L | 20.0 | | 115 | 70-130 | | | |
| trans-1,2-Dichloroethene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | | | |
| 1,1,1-Trichloroethane | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Trichloroethene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| Vinyl chloride | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 65-135 | | | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.10 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC04365-BSD1)** | | | | | Prepared: 03/20/20 Analyzed: 03/21/20 | | | | | | |
| Acrylonitrile | 22.0 | 0.40 | 2.0 | ug/L | 20.0 | | 110 | 60-140 | 2.65 | 25 | |
| Benzene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 65-135 | 5.50 | 25 | |
| Bromoform | 23.9 | 0.30 | 0.50 | ug/L | 20.0 | | 120 | 70-130 | 3.31 | 25 | |
| Carbon tetrachloride | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-130 | 4.76 | 25 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 4.29 | 25 | |
| Dibromochloromethane | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 70-135 | 1.31 | 25 | |
| Chloroethane | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 87.8 | 40-160 | 5.27 | 25 | |
| Chloroform | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-135 | 4.51 | 25 | |
| Bromodichloromethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | | 124 | 65-135 | 0.880 | 25 | |
| 1,1-Dichloroethane | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | 5.48 | 25 | |
| 1,2-Dichloroethane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.1 | 70-130 | 9.99 | 25 | |
| 1,1-Dichloroethene | 18.7 | 0.30 | 0.50 | ug/L | 20.0 | | 93.6 | 50-150 | 12.2 | 25 | |
| 1,2-Dichloropropane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 35-165 | 1.37 | 25 | |
| cis-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 25-175 | 0.146 | 25 | |
| trans-1,3-Dichloropropene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 50-150 | 0.466 | 25 | |
| Ethylbenzene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 60-140 | 4.98 | 25 | |
| Bromomethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.7 | 15-185 | 0.777 | 25 | |
| Chloromethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 94.9 | 2-205 | 10.4 | 25 | |
| Methylene chloride | 20.4 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.41 | 25 | |
| 1,1,2,2-Tetrachloroethane | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 60-140 | 0.696 | 25 | |
| Tetrachloroethene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 70-130 | 6.16 | 25 | |
| Toluene | 22.1 | 0.30 | 0.30 | ug/L | 20.0 | | 110 | 70-130 | 3.91 | 25 | |
| trans-1,2-Dichloroethene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 5.49 | 25 | |
| 1,1,1-Trichloroethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 4.21 | 25 | |
| 1,1,2-Trichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 2.54 | 25 | |
| Trichloroethene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 65-135 | 5.64 | 25 | |
| Vinyl chloride | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 5-195 | 4.54 | 25 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | 2.61 | 25 | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-130 | 2.62 | 25 | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | 2.88 | 25 | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04365-MS1)** | | **Source: 20C1080-02** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | ND | 119 | 40-160 | | | |
| Benzene | 23.7 | 0.30 | 0.30 | ug/L | 20.0 | ND | 119 | 37-151 | | | |
| Bromoform | 23.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 119 | 45-169 | | | |
| Carbon tetrachloride | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | | | |
| Chlorobenzene | 22.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 111 | 37-160 | | | |
| Dibromochloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 53-149 | | | |
| Chloroethane | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.2 | 14-230 | | | |
| Chloroform | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 51-138 | | | |
| Bromodichloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 35-155 | | | |
| 1,1-Dichloroethane | 23.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 59-155 | | | |
| 1,2-Dichloroethane | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 49-155 | | | |
| 1,1-Dichloroethene | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 2-234 | | | |
| 1,2-Dichloropropane | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 17-183 | | | |
| Ethylbenzene | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 37-162 | | | |
| Bromomethane | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.5 | 2-242 | | | |
| Chloromethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 2-273 | | | |
| Methylene chloride | 22.3 | 0.50 | 0.50 | ug/L | 20.0 | ND | 111 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 115 | 46-157 | | | |
| Tetrachloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 64-148 | | | |
| Toluene | 25.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 126 | 47-150 | | | |
| trans-1,2-Dichloroethene | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 54-156 | | | |
| 1,1,1-Trichloroethane | 24.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 124 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | | | |
| Trichloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-157 | | | |
| Vinyl chloride | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 2-251 | | | |
| 1,2-Dichlorobenzene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.6* | | | *ug/L* | *25.0* | | *98.5* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04365 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04365-MSD1)** | | **Source: 20C1080-02** | | | Prepared: 03/20/20 Analyzed: 03/22/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 117 | 40-160 | 1.69 | 60 | |
| Benzene | 23.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 116 | 37-151 | 1.87 | 61 | |
| Bromoform | 24.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 123 | 45-169 | 3.02 | 42 | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | 3.35 | 41 | |
| Chlorobenzene | 22.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 111 | 37-160 | 0.405 | 53 | |
| Dibromochloromethane | 24.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 120 | 53-149 | 1.43 | 50 | |
| Chloroethane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 90.0 | 14-230 | 4.50 | 78 | |
| Chloroform | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 51-138 | 2.04 | 54 | |
| Bromodichloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 35-155 | 0.774 | 56 | |
| 1,1-Dichloroethane | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 115 | 59-155 | 1.43 | 40 | |
| 1,2-Dichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 49-155 | 2.27 | 49 | |
| 1,1-Dichloroethene | 23.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 118 | 2-234 | 0.597 | 32 | |
| 1,2-Dichloropropane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 2-210 | 0.498 | 55 | |
| cis-1,3-Dichloropropene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 2-227 | 2.67 | 58 | |
| trans-1,3-Dichloropropene | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 17-183 | 3.92 | 86 | |
| Ethylbenzene | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 37-162 | 0.480 | 63 | |
| Bromomethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 95.2 | 2-242 | 0.315 | 61 | |
| Chloromethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 2-273 | 3.99 | 60 | |
| Methylene chloride | 21.8 | 0.50 | 0.50 | ug/L | 20.0 | ND | 109 | 2-221 | 2.41 | 28 | |
| 1,1,2,2-Tetrachloroethane | 22.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 112 | 46-157 | 2.33 | 61 | |
| Tetrachloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 64-148 | 0.130 | 39 | |
| Toluene | 25.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 126 | 47-150 | 0.278 | 41 | |
| trans-1,2-Dichloroethene | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 54-156 | 0.171 | 45 | |
| 1,1,1-Trichloroethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 52-162 | 0.644 | 36 | |
| 1,1,2-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | 0.137 | 45 | |
| Trichloroethene | 23.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 70-157 | 0.00 | 48 | |
| Vinyl chloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 2-251 | 4.08 | 66 | |
| 1,2-Dichlorobenzene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 0.937 | 57 | |
| 1,3-Dichlorobenzene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 59-156 | 0.269 | 43 | |
| 1,4-Dichlorobenzene | 21.1 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 1.13 | 57 | |
| *Surrogate: Bromofluorobenzene* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04117-BLK1)** | | | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | 0.590 | 0.30 | 2.0 | ug/L | | | | | | | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 6.34 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04117-BLK1)** | | | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *23.0* | | | *ug/L* | *40.0* | | *57.5* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *19.2* | | | *ug/L* | *40.0* | | *47.9* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.2* | | | *ug/L* | *40.0* | | *55.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.7* | | | *ug/L* | *40.0* | | *99.2* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *11.1* | | | *ug/L* | *40.0* | | *27.8* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *28.6* | | | *ug/L* | *40.0* | | *71.4* | *4-168* | | | |
| **LCS (AC04117-BS1)** | | | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| 2-Chlorophenol | 35.0 | 0.70 | 5.0 | ug/L | 40.0 | | 87.4 | 36-120 | | | |
| 2,4-Dichlorophenol | 39.5 | 0.70 | 5.0 | ug/L | 40.0 | | 98.6 | 53-122 | | | |
| 2,4-Dimethylphenol | 26.6 | 1.0 | 2.0 | ug/L | 50.0 | | 53.1 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 33.3 | 3.0 | 5.0 | ug/L | 40.0 | | 83.2 | 53-130 | | | |
| 2,4-Dinitrophenol | 35.4 | 5.0 | 5.0 | ug/L | 40.0 | | 88.6 | 10-173 | | | |
| 2-Nitrophenol | 37.8 | 0.90 | 10 | ug/L | 40.0 | | 94.5 | 45-167 | | | |
| 4-Nitrophenol | 19.4 | 3.0 | 10 | ug/L | 40.0 | | 48.6 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 42.7 | 1.0 | 1.0 | ug/L | 40.0 | | 107 | 41-128 | | | |
| Pentachlorophenol | 40.4 | 4.0 | 5.0 | ug/L | 40.0 | | 101 | 38-152 | | | |
| 2-Methylphenol (o-cresol) | 30.1 | 0.60 | 5.0 | ug/L | 40.0 | | 75.3 | 36-102 | | | |
| Phenol | 17.9 | 0.50 | 1.0 | ug/L | 40.0 | | 44.8 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 42.9 | 0.70 | 10 | ug/L | 40.0 | | 107 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 28.5 | 0.90 | 5.0 | ug/L | 40.0 | | 71.4 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 25.6 | 0.90 | 1.0 | ug/L | 40.0 | | 64.0 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.5 | 1.0 | 2.0 | ug/L | 40.0 | | 73.8 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 37.0 | 3.0 | 5.0 | ug/L | 40.0 | | 92.6 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 30.9 | 1.0 | 5.0 | ug/L | 40.0 | | 77.2 | 65-120 | | | |
| Butyl benzyl phthalate | 17.9 | 0.60 | 10 | ug/L | 40.0 | | 44.8 | 2-140 | | | |
| 2-Chloronaphthalene | 28.1 | 0.60 | 10 | ug/L | 40.0 | | 70.4 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 29.6 | 0.90 | 5.0 | ug/L | 40.0 | | 74.1 | 38-145 | | | |
| 1,4-Dichlorobenzene | 23.5 | 0.60 | 1.0 | ug/L | 40.0 | | 58.8 | 32-91 | | | |
| 1,3-Dichlorobenzene | 23.0 | 0.60 | 1.0 | ug/L | 40.0 | | 57.4 | 31-92 | | | |
| 1,2-Dichlorobenzene | 23.8 | 0.60 | 2.0 | ug/L | 40.0 | | 59.4 | 33-93 | | | |
| Diethyl phthalate | 22.7 | 0.30 | 2.0 | ug/L | 40.0 | | 56.7 | 2-120 | | | |
| Dimethyl phthalate | 10.2 | 0.80 | 2.0 | ug/L | 40.0 | | 25.6 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04117-BS1)** | | | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| Di-n-butyl phthalate | 37.6 | 0.90 | 10 | ug/L | 40.0 | | 93.9 | 8-120 | | | |
| 2,4-Dinitrotoluene | 36.7 | 0.80 | 5.0 | ug/L | 40.0 | | 91.8 | 48-127 | | | |
| 2,6-Dinitrotoluene | 34.5 | 0.80 | 5.0 | ug/L | 40.0 | | 86.2 | 68-137 | | | |
| Di-n-octyl phthalate | 14.9 | 0.60 | 10 | ug/L | 40.0 | | 37.2 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 31.3 | 0.60 | 1.0 | ug/L | 40.0 | | 78.2 | 52-115 | | | |
| Hexachlorobenzene | 29.4 | 0.90 | 1.0 | ug/L | 40.0 | | 73.4 | 8-142 | | | |
| Hexachlorobutadiene | 23.9 | 0.80 | 1.0 | ug/L | 40.0 | | 59.7 | 38-120 | | | |
| Hexachlorocyclopentadiene | 18.1 | 4.0 | 5.0 | ug/L | 40.0 | | 45.2 | 16-93 | | | |
| Hexachloroethane | 22.3 | 0.60 | 1.0 | ug/L | 40.0 | | 55.7 | 55-120 | | | |
| Isophorone | 30.8 | 0.30 | 1.0 | ug/L | 40.0 | | 77.0 | 47-180 | | | |
| Nitrobenzene | 26.7 | 0.90 | 1.0 | ug/L | 40.0 | | 66.8 | 54-158 | | | |
| N-Nitrosodimethylamine | 19.7 | 0.30 | 5.0 | ug/L | 40.0 | | 49.3 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 28.0 | 0.80 | 5.0 | ug/L | 40.0 | | 70.0 | 14-198 | | | |
| N-Nitrosodiphenylamine | 30.5 | 1.0 | 1.0 | ug/L | 40.0 | | 76.3 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 24.4 | 0.60 | 5.0 | ug/L | 40.0 | | 60.9 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *23.0* | | | *ug/L* | *40.0* | | *57.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *22.5* | | | *ug/L* | *40.0* | | *56.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *21.5* | | | *ug/L* | *40.0* | | *53.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.2* | | | *ug/L* | *40.0* | | *88.1* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *12.6* | | | *ug/L* | *40.0* | | *31.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *34.5* | | | *ug/L* | *40.0* | | *86.3* | *4-168* | | | |
| **Matrix Spike (AC04117-MS1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| 2-Chlorophenol | 32.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 81.5 | 23-134 | | | |
| 2,4-Dichlorophenol | 40.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 100 | 39-135 | | | |
| 2,4-Dimethylphenol | 28.4 | 1.0 | 2.0 | ug/L | 50.0 | ND | 56.8 | 32-120 | | | |
| 4,6-Dinitro-2-methylphenol | 34.1 | 3.0 | 5.0 | ug/L | 40.0 | ND | 85.2 | 7-181 | | | |
| 2,4-Dinitrophenol | 31.4 | 5.0 | 5.0 | ug/L | 40.0 | ND | 78.6 | 10-191 | | | |
| 2-Nitrophenol | 41.9 | 0.90 | 10 | ug/L | 40.0 | ND | 105 | 29-182 | | | |
| 4-Nitrophenol | 38.8 | 3.0 | 10 | ug/L | 40.0 | ND | 96.9 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 53.8 | 1.0 | 1.0 | ug/L | 40.0 | ND | 134 | 22-147 | | | |
| Pentachlorophenol | 46.3 | 4.0 | 5.0 | ug/L | 40.0 | ND | 116 | 14-176 | | | |
| 2-Methylphenol (o-cresol) | 31.7 | 0.60 | 5.0 | ug/L | 40.0 | ND | 79.2 | 9-124 | | | |
| Phenol | 23.9 | 0.50 | 1.0 | ug/L | 40.0 | ND | 59.7 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 44.8 | 0.70 | 10 | ug/L | 40.0 | ND | 112 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 30.3 | 0.90 | 5.0 | ug/L | 40.0 | ND | 75.7 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 24.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 61.8 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04117-MS1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 24.0 | 1.0 | 2.0 | ug/L | 40.0 | ND | 60.0 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 62.0 | 3.0 | 5.0 | ug/L | 40.0 | ND | 155 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 37.4 | 1.0 | 5.0 | ug/L | 40.0 | ND | 93.4 | 53-127 | | | |
| Butyl benzyl phthalate | 12.7 | 0.60 | 10 | ug/L | 40.0 | ND | 31.8 | 2-152 | | | |
| 2-Chloronaphthalene | 27.6 | 0.60 | 10 | ug/L | 40.0 | ND | 69.1 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 34.6 | 0.90 | 5.0 | ug/L | 40.0 | ND | 86.4 | 25-158 | | | |
| 1,4-Dichlorobenzene | 23.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 59.7 | 3-105 | | | |
| 1,2-Dichlorobenzene | 23.0 | 0.60 | 2.0 | ug/L | 40.0 | ND | 57.6 | 7-104 | | | |
| 1,3-Dichlorobenzene | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 59.0 | 1-106 | | | |
| Diethyl phthalate | 15.4 | 0.30 | 2.0 | ug/L | 40.0 | 0.660 | 36.8 | 2-120 | | | |
| Dimethyl phthalate | 3.49 | 0.80 | 2.0 | ug/L | 40.0 | ND | 8.72 | 2-120 | | | |
| Di-n-butyl phthalate | 36.5 | 0.90 | 10 | ug/L | 40.0 | 5.88 | 76.6 | 1-120 | | | |
| 2,4-Dinitrotoluene | 47.2 | 0.80 | 5.0 | ug/L | 40.0 | ND | 118 | 39-139 | | | |
| 2,6-Dinitrotoluene | 42.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 106 | 50-158 | | | |
| Di-n-octyl phthalate | 10.6 | 0.60 | 10 | ug/L | 40.0 | ND | 26.6 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 36.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 91.2 | 39-116 | | | |
| Hexachlorobenzene | 31.8 | 0.90 | 1.0 | ug/L | 40.0 | ND | 79.4 | 2-152 | | | |
| Hexachlorobutadiene | 24.4 | 0.80 | 1.0 | ug/L | 40.0 | ND | 61.0 | 24-120 | | | |
| Hexachlorocyclopentadiene | 15.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 39.7 | 10-93 | | | |
| Hexachloroethane | 21.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 54.6 | 40-120 | | | |
| Isophorone | 33.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 82.8 | 21-196 | | | |
| Nitrobenzene | 26.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 66.6 | 35-180 | | | |
| N-Nitrosodimethylamine | 29.0 | 0.30 | 5.0 | ug/L | 40.0 | ND | 72.4 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 26.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 67.4 | 2-230 | | | |
| N-Nitrosodiphenylamine | 37.8 | 1.0 | 1.0 | ug/L | 40.0 | ND | 94.4 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 24.8 | 0.60 | 5.0 | ug/L | 40.0 | ND | 62.0 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *20.0* | | | *ug/L* | *40.0* | | *49.9* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *26.6* | | | *ug/L* | *40.0* | | *66.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *19.9* | | | *ug/L* | *40.0* | | *49.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.5* | | | *ug/L* | *40.0* | | *88.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *17.0* | | | *ug/L* | *40.0* | | *42.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.1* | | | *ug/L* | *40.0* | | *92.7* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04117-MSD1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| 2-Chlorophenol | 27.7 | 0.70 | 5.0 | ug/L | 40.0 | ND | 69.3 | 23-134 | 16.2 | 61 | |
| 2,4-Dichlorophenol | 31.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 77.5 | 39-135 | 25.8 | 50 | |
| 2,4-Dimethylphenol | 17.8 | 1.0 | 2.0 | ug/L | 50.0 | ND | 35.6 | 32-120 | 45.7 | 58 | |
| 4,6-Dinitro-2-methylphenol | 23.3 | 3.0 | 5.0 | ug/L | 40.0 | ND | 58.4 | 7-181 | 37.4 | 203 | |
| 2,4-Dinitrophenol | 17.5 | 5.0 | 5.0 | ug/L | 40.0 | ND | 43.8 | 10-191 | 56.9 | 132 | |
| 2-Nitrophenol | 36.2 | 0.90 | 10 | ug/L | 40.0 | ND | 90.6 | 29-182 | 14.5 | 55 | |
| 4-Nitrophenol | 21.0 | 3.0 | 10 | ug/L | 40.0 | ND | 52.6 | 7-132 | 59.2 | 131 | |
| 4-Chloro-3-methylphenol | 40.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 100 | 22-147 | 29.3 | 73 | |
| 2-Methylphenol (o-cresol) | 29.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 72.4 | 9-124 | 9.01 | 28 | |
| Pentachlorophenol | 41.4 | 4.0 | 5.0 | ug/L | 40.0 | ND | 104 | 14-176 | 11.1 | 86 | |
| Phenol | 22.3 | 0.50 | 1.0 | ug/L | 40.0 | ND | 55.8 | 5-120 | 6.84 | 64 | |
| 2,4,6-Trichlorophenol | 35.7 | 0.70 | 10 | ug/L | 40.0 | ND | 89.2 | 37-144 | 22.7 | 58 | |
| Bis(2-chloroethoxy)methane | 32.2 | 0.90 | 5.0 | ug/L | 40.0 | ND | 80.4 | 33-184 | 5.99 | 54 | |
| Bis(2-chloroethyl)ether | 27.8 | 0.90 | 1.0 | ug/L | 40.0 | ND | 69.6 | 12-158 | 11.8 | 108 | |
| Bis(2-chloroisopropyl)ether | 27.5 | 1.0 | 2.0 | ug/L | 40.0 | ND | 68.8 | 36-166 | 13.7 | 76 | |
| Bis(2-ethylhexyl)phthalate | 39.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 99.8 | 8-158 | 43.3 | 82 | |
| 4-Bromophenyl phenyl ether | 40.9 | 1.0 | 5.0 | ug/L | 40.0 | ND | 102 | 53-127 | 9.00 | 43 | |
| Butyl benzyl phthalate | 19.9 | 0.60 | 10 | ug/L | 40.0 | ND | 49.6 | 2-152 | 43.9 | 60 | |
| 2-Chloronaphthalene | 32.0 | 0.60 | 10 | ug/L | 40.0 | ND | 80.0 | 60-120 | 14.6 | 24 | |
| 4-Chlorophenyl phenyl ether | 34.6 | 0.90 | 5.0 | ug/L | 40.0 | ND | 86.4 | 25-158 | 0.0289 | 61 | |
| 1,2-Dichlorobenzene | 25.2 | 0.60 | 2.0 | ug/L | 40.0 | ND | 63.1 | 7-104 | 9.20 | 41 | |
| 1,4-Dichlorobenzene | 26.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 65.2 | 3-105 | 8.77 | 42 | |
| 1,3-Dichlorobenzene | 24.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 62.2 | 1-106 | 5.24 | 41 | |
| Diethyl phthalate | 17.9 | 0.30 | 2.0 | ug/L | 40.0 | 0.660 | 43.1 | 2-120 | 15.1 | 100 | |
| Dimethyl phthalate | 7.62 | 0.80 | 2.0 | ug/L | 40.0 | ND | 19.0 | 2-120 | 74.3 | 183 | |
| Di-n-butyl phthalate | 39.6 | 0.90 | 10 | ug/L | 40.0 | 5.88 | 84.2 | 1-120 | 8.02 | 47 | |
| 2,4-Dinitrotoluene | 41.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 103 | 39-139 | 13.9 | 42 | |
| 2,6-Dinitrotoluene | 40.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 100 | 50-158 | 5.65 | 48 | |
| Di-n-octyl phthalate | 14.4 | 0.60 | 10 | ug/L | 40.0 | ND | 35.9 | 4-146 | 29.8 | 69 | |
| 1,2-Diphenylhydrazine | 40.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 101 | 39-116 | 10.4 | 25 | |
| Hexachlorobenzene | 36.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 91.7 | 2-152 | 14.4 | 55 | |
| Hexachlorobutadiene | 27.0 | 0.80 | 1.0 | ug/L | 40.0 | ND | 67.4 | 24-120 | 10.0 | 62 | |
| Hexachlorocyclopentadiene | 21.4 | 4.0 | 5.0 | ug/L | 40.0 | ND | 53.5 | 10-93 | 29.5 | 55 | |
| Hexachloroethane | 24.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 61.0 | 40-120 | 10.9 | 52 | |
| Isophorone | 36.6 | 0.30 | 1.0 | ug/L | 40.0 | ND | 91.6 | 21-196 | 9.98 | 93 | |
| Nitrobenzene | 29.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 73.7 | 35-180 | 10.1 | 62 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04117 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04117-MSD1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/25/20 | | | | | | |
| N-Nitrosodimethylamine | 29.4 | 0.30 | 5.0 | ug/L | 40.0 | ND | 73.6 | 10-84 | 1.61 | 59 | |
| N-Nitrosodi-n-propylamine | 31.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 78.6 | 2-230 | 15.4 | 87 | |
| N-Nitrosodiphenylamine | 39.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 97.5 | 40-115 | 3.20 | 25 | |
| 1,2,4-Trichlorobenzene | 27.7 | 0.60 | 5.0 | ug/L | 40.0 | ND | 69.2 | 44-142 | 11.0 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *23.6* | | | *ug/L* | *40.0* | | *59.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *20.9* | | | *ug/L* | *40.0* | | *52.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *22.6* | | | *ug/L* | *40.0* | | *56.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.8* | | | *ug/L* | *40.0* | | *76.9* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *15.6* | | | *ug/L* | *40.0* | | *38.9* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *30.6* | | | *ug/L* | *40.0* | | *76.6* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04349 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04349-BLK1)** | | | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *30.9* | | | *ug/L* | *40.0* | | *77.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.9* | | | *ug/L* | *40.0* | | *77.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.7* | | | *ug/L* | *40.0* | | *107* | *36-141* | | | |
| **LCS (AC04349-BS1)** | | | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 14.6 | 3.00 | 5.00 | ug/L | 79.4 | | 18.4 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 78.4 | 2.00 | 5.00 | ug/L | 79.4 | | 98.8 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.4* | | | *ug/L* | *40.0* | | *80.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.6* | | | *ug/L* | *40.0* | | *81.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *45.2* | | | *ug/L* | *40.0* | | *113* | *36-141* | | | |
| **Matrix Spike (AC04349-MS1)** | | **Source: 20C2037-02** | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 22.6 | 3.00 | 5.00 | ug/L | 79.4 | ND | 28.5 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 74.2 | 2.00 | 5.00 | ug/L | 79.4 | ND | 93.5 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.2* | | | *ug/L* | *40.0* | | *80.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.2* | | | *ug/L* | *40.0* | | *82.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.6* | | | *ug/L* | *40.0* | | *104* | *36-141* | | | |
| **Matrix Spike Dup (AC04349-MSD1)** | | **Source: 20C2037-02** | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 16.3 | 3.00 | 5.00 | ug/L | 79.4 | ND | 20.6 | 4-262 | 32.1 | 108 | |
| 3,3´-Dichlorobenzidine | 69.9 | 2.00 | 5.00 | ug/L | 79.4 | ND | 88.1 | 4-262 | 6.00 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.2* | | | *ug/L* | *40.0* | | *80.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.0* | | | *ug/L* | *40.0* | | *82.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.5* | | | *ug/L* | *40.0* | | *101* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04792 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04792-BLK1)** | | | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *26.2* | | | *ug/L* | *40.0* | | *65.4* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *26.2* | | | *ug/L* | *40.0* | | *65.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *48.8* | | | *ug/L* | *40.0* | | *122* | *37-139* | | | |
| **LCS (AC04792-BS1)** | | | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Acenaphthene | 31.3 | 0.20 | 0.20 | ug/L | 40.0 | | 78.2 | 60-132 | | | |
| Acenaphthylene | 31.2 | 0.20 | 0.20 | ug/L | 40.0 | | 78.0 | 54-126 | | | |
| Anthracene | 31.7 | 0.090 | 0.20 | ug/L | 40.0 | | 79.3 | 43-120 | | | |
| Benzo (a) anthracene | 29.6 | 0.20 | 0.20 | ug/L | 40.0 | | 73.9 | 42-133 | | | |
| Benzo (a) pyrene | 28.7 | 0.20 | 0.20 | ug/L | 40.0 | | 71.8 | 32-148 | | | |
| Benzo (b) fluoranthene | 29.2 | 0.20 | 0.20 | ug/L | 40.0 | | 73.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 28.8 | 0.10 | 0.20 | ug/L | 40.0 | | 72.0 | 2-195 | | | |
| Benzo (k) fluoranthene | 35.7 | 0.20 | 0.20 | ug/L | 40.0 | | 89.2 | 25-146 | | | |
| Chrysene | 35.2 | 0.20 | 0.20 | ug/L | 40.0 | | 87.9 | 44-140 | | | |
| Dibenz (a,h) anthracene | 30.4 | 0.10 | 0.20 | ug/L | 40.0 | | 75.9 | 2-200 | | | |
| Fluoranthene | 38.7 | 0.070 | 0.20 | ug/L | 40.0 | | 96.7 | 43-121 | | | |
| Fluorene | 32.1 | 0.20 | 0.20 | ug/L | 40.0 | | 80.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 28.4 | 0.030 | 0.20 | ug/L | 40.0 | | 71.0 | 2-151 | | | |
| Naphthalene | 29.0 | 0.090 | 0.20 | ug/L | 40.0 | | 72.5 | 36-120 | | | |
| Phenanthrene | 33.5 | 0.10 | 0.20 | ug/L | 40.0 | | 83.8 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04792 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04792-BS1)** | | | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Pyrene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | | 70.2 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *27.9* | | | *ug/L* | *40.0* | | *69.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.2* | | | *ug/L* | *40.0* | | *83.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.4* | | | *ug/L* | *40.0* | | *71.0* | *37-139* | | | |
| **Matrix Spike (AC04792-MS1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Acenaphthene | 31.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.8 | 47-145 | | | |
| Acenaphthylene | 32.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.2 | 33-145 | | | |
| Anthracene | 37.6 | 0.090 | 0.20 | ug/L | 40.0 | ND | 93.9 | 27-133 | | | |
| Benzo (a) anthracene | 33.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.7 | 33-143 | | | |
| Benzo (a) pyrene | 33.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.2 | 17-163 | | | |
| Benzo (b) fluoranthene | 43.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 108 | 24-159 | | | |
| Benzo (g,h,i) perylene | 32.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 82.0 | 2-219 | | | |
| Benzo (k) fluoranthene | 31.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 78.5 | 11-162 | | | |
| Chrysene | 38.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 95.0 | 17-168 | | | |
| Dibenz (a,h) anthracene | 32.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 81.8 | 2-227 | | | |
| Fluoranthene | 39.2 | 0.070 | 0.20 | ug/L | 40.0 | ND | 98.0 | 26-137 | | | |
| Fluorene | 35.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 87.6 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 32.9 | 0.030 | 0.20 | ug/L | 40.0 | ND | 82.3 | 2-171 | | | |
| Naphthalene | 26.9 | 0.090 | 0.20 | ug/L | 40.0 | ND | 67.3 | 21-133 | | | |
| Phenanthrene | 38.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 96.6 | 54-120 | | | |
| Pyrene | 39.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.9 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *24.8* | | | *ug/L* | *40.0* | | *62.1* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.8* | | | *ug/L* | *40.0* | | *74.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.5* | | | *ug/L* | *40.0* | | *81.4* | *37-139* | | | |
| **Matrix Spike Dup (AC04792-MSD1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Acenaphthene | 36.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 90.1 | 47-145 | 12.2 | 48 | |
| Acenaphthylene | 35.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.4 | 33-145 | 9.67 | 74 | |
| Anthracene | 39.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 97.6 | 27-133 | 3.92 | 66 | |
| Benzo (a) anthracene | 37.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.7 | 33-143 | 12.5 | 53 | |
| Benzo (a) pyrene | 32.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.0 | 17-163 | 1.42 | 72 | |
| Benzo (b) fluoranthene | 43.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 109 | 24-159 | 1.27 | 71 | |
| Benzo (g,h,i) perylene | 36.2 | 0.10 | 0.20 | ug/L | 40.0 | ND | 90.6 | 2-219 | 9.93 | 97 | |
| Benzo (k) fluoranthene | 30.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 75.5 | 11-162 | 3.90 | 63 | |
| Chrysene | 41.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 102 | 17-168 | 7.44 | 87 | |
| Dibenz (a,h) anthracene | 35.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 87.8 | 2-227 | 7.04 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:46 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04792 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04792-MSD1)** | | **Source: 20C1590-01** | | | Prepared: 03/18/20 Analyzed: 03/27/20 | | | | | | |
| Fluoranthene | 49.8 | 0.070 | 0.20 | ug/L | 40.0 | ND | 124 | 26-137 | 23.7 | 66 | |
| Fluorene | 33.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 84.4 | 59-121 | 3.60 | 38 | |
| Indeno (1,2,3-cd) pyrene | 35.8 | 0.030 | 0.20 | ug/L | 40.0 | ND | 89.5 | 2-171 | 8.32 | 99 | |
| Naphthalene | 31.9 | 0.090 | 0.20 | ug/L | 40.0 | ND | 79.6 | 21-133 | 16.8 | 65 | |
| Phenanthrene | 39.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 99.4 | 54-120 | 2.78 | 39 | |
| Pyrene | 44.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 111 | 52-120 | 12.5 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *29.0* | | | *ug/L* | *40.0* | | *72.4* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *31.5* | | | *ug/L* | *40.0* | | *78.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.1* | | | *ug/L* | *40.0* | | *103* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 08:46 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union[illegible] Wy., #113, Elk Grove, CA 95624
91[illegible]5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. 20C2038



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

1.6°C Ukiah

| Field Sampler - Print Name & Signature: David Walter David C Walt | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | 3-16-2020 | 1215 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-16-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**TAT:** 24 hr ○ 48 hr ○ (Lab Approval Required) 1 wk ○ 2 wk (standard) ✓ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/16/20 | 1605 |
| | PH | 3-16-20 | 18:52 |
| PH | PH | 3-16-20 | 21:17 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**



**20C2038**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | | | |
|---|---|---|---|
| **Client:** | **Golder Associates - Sunnyvale** | **Project Manager:** | **Robbie C. Phillips** |
| **Project:** | **EMSA/WMSA Sampling** | **Project Number:** | **Ground Water** |

| | | | |
|---|---|---|---|
| Date Due: | 03/31/20 15:00 (10 day TAT) | | |
| Received By: | Pete L. Hathaway | Date Received: | 03/16/20 21:18 |
| Logged In By: | Leslie M. Quinn | Date Logged In: | 03/16/20 21:18 |

Samples Received at: _____ deg C

All containers intact: YES NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C2038-01 WMSA-DMW-5 [Water] Sampled 03/16/20 12:15 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 | BAL Metals | 04/13/20 12:15 | | |
| **20C2038-01 WMSA-DMW-5 [Water] Sampled 03/16/20 12:15 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/13/20 12:15 | | |

| | | | | | |
|---|---|---|---|---|---|
| Leslie M Quinn | 3.16.20 | | PH | 3-18-20 | 12:55 |
| Relinquished By | Date | Time | Received By | Date | Time |
| PH | 3-18-20 | 1609 | VW | 3/18/20 | 1609 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C2261

Enclosed are the results of analyses for samples received by the laboratory on 03/17/20 22:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 08:30 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-1s | 20C2261-01 | Water | 03/17/20 13:00 | 03/17/20 22:10 |
| EMSA-DMW-1d | 20C2261-02 | Water | 03/17/20 11:55 | 03/17/20 22:10 |
| EMSA-DMW-9 | 20C2261-03 | Water | 03/17/20 14:00 | 03/17/20 22:10 |
| DUP | 20C2261-04 | Water | 03/17/20 14:30 | 03/17/20 22:10 |
| Blank - Ground Water | 20C2261-05 | Water | 03/17/20 00:00 | 03/17/20 22:10 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04293 | 03/20/20 00:06 | 03/20/20 00:06 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04293 | 03/20/20 00:24 | 03/20/20 00:24 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04293 | 03/20/20 00:43 | 03/20/20 00:43 | EPA 218.6 | LRN | 1551 | U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04293 | 03/20/20 01:01 | 03/20/20 01:01 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 03:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 03:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 03:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **11** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 03:08 | EPA 200.8 | SMP | 1551 | |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:21 | EPA 200.8 | SMP | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 03:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 17:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:39 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:39 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:39 | EPA 200.8 | SMP | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:10 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic** | **7.2** | **4.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:19 | EPA 200.8 | SMP | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:56 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **8.7** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:33 | EPA 200.8 | SMP | 1551 | |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:56 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 00:56 | EPA 200.8 | SMP | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic** | **7.1** | **4.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:28 | EPA 200.8 | SMP | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 01:13 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Copper** | **100** | **4.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:28 | EPA 200.8 | SMP | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **8.2** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:42 | EPA 200.8 | SMP | 1551 | |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 01:13 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 01:13 | EPA 200.8 | SMP | 1551 | U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Zinc** | **70** | **40** | **50** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:28 | EPA 200.8 | SMP | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/20/20 20:03 | 03/20/20 20:03 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/20/20 23:09 | 03/20/20 23:09 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/20/20 23:28 | 03/20/20 23:28 | EPA 218.6 | LRN | 1551 | U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/20/20 23:46 | 03/20/20 23:46 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **10** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 15:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 22:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:43 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **7.5** | **4.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **7.1** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:08 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 17:52 | EPA 200.8 | SMP | 1551 | R-01, U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **7.6** | **4.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **61** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:00 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury | ND | 2.00 | 5.00 | ng/l | 10 | AD03177 | 04/02/20 17:00 | 04/03/20 15:49 | EPA 1631E | AJC | 2728 | R-01, U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| **Mercury** | **0.314** | **0.200** | **0.500** | **ng/l** | 1 | AD03177 | 04/02/20 17:00 | 04/03/20 15:57 | EPA 1631E | AJC | 2728 | J |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury | ND | 2.00 | 5.00 | ng/l | 10 | AD03177 | 04/02/20 17:00 | 04/03/20 16:05 | EPA 1631E | AJC | 2728 | R-01, U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury | ND | 2.00 | 5.00 | ng/l | 10 | AD03177 | 04/02/20 17:00 | 04/03/20 16:29 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 16:02 | EPA 1631E | AJC | 2728 | R-01, U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 16:10 | EPA 1631E | AJC | 2728 | U |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 16:35 | EPA 1631E | AJC | 2728 | R-01, U |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 16:43 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04736 | 03/26/20 08:30 | 03/26/20 13:58 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04736 | 03/26/20 08:30 | 03/26/20 14:03 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| **Cyanide (total)** | **0.0024** | **0.0020** | **0.0030** | **mg/L** | 1 | AC04736 | 03/26/20 08:30 | 03/26/20 14:04 | 10-204-00-1X | EV | 1551 | J |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AC04736 | 03/26/20 08:30 | 03/26/20 14:06 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/30/20 23:46 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/30/20 23:46 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *101 %* | *39-120* | | | *AC04350* | *03/23/20 08:00* | *03/30/20 23:46* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/31/20 00:20 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/31/20 00:20 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *110 %* | *39-120* | | | *AC04350* | *03/23/20 08:00* | *03/31/20 00:20* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/31/20 00:55 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 03/31/20 00:55 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *110 %* | *39-120* | | | *AC04350* | *03/23/20 08:00* | *03/31/20 00:55* | *8015DRO* | *NBH* | 1551 | |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 04/01/20 09:04 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04350 | 03/23/20 08:00 | 04/01/20 09:04 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *116 %* | *39-120* | | | *AC04350* | *03/23/20 08:00* | *04/01/20 09:04* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 10:16 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *103 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 10:16* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 10:51 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.8 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 10:51* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 11:26 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *103 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 11:26* | *8260GRO* | *JV* | 1551 | |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 12:00 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *101 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 12:00* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 20:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 21:05 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 21:40 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 22:14 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2261-05) Water Sampled: 03/17/20 00:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 22:49 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 20:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 20:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 21:05 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:05* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 21:40 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 21:40* | *EPA 624.1* | *JV* | 1551 | |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 22:14 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *103 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:14* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2261-05) Water Sampled: 03/17/20 00:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/19/20 22:49 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/19/20 22:49* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:16 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *118 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *118 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:16* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 10:51 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:51* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *116 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:51* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *113 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 10:51* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 11:26 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *117 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 11:26* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *117 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 11:26* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 11:26* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:00 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *118 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *118 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:00* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C2261-05) Water Sampled: 03/17/20 00:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 12:35 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *110 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *117 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 12:35* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water** | **Sampled: 03/17/20 13:00** | **Received: 03/17/20 22:10** | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.39** | **0.30** | **2.0** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **2.9** | **0.90** | **10** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:00 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *88.8 %* | *27-119* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *1.85 %* | *7-85* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *80.8 %* | *15-314* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *91.3 %* | *36-141* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *1.95 %* | *1-65* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *16.2 %* | *4-168* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:00* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.58** | **0.30** | **2.0** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **3.8** | **0.90** | **10** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 01:36 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *68.4 %* | *27-119* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *58.2 %* | *7-85* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *70.0 %* | *15-314* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *89.1 %* | *36-141* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *40.2 %* | *1-65* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *98.2 %* | *4-168* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 01:36* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-9 (20C2261-03) Water** | **Sampled: 03/17/20 14:00** | | **Received: 03/17/20 22:10** | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.48** | **0.30** | **2.0** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.0** | **0.90** | **10** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:12 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *93.5 %* | *27-119* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *2.78 %* | *7-85* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *84.6 %* | *15-314* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *99.0 %* | *36-141* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *3.10 %* | *1-65* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *8.60 %* | *4-168* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:12* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| **Diethyl phthalate** | **0.50** | **0.30** | **2.0** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **4.3** | **0.90** | **10** | **ug/L** | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04431 | 03/24/20 08:00 | 04/01/20 02:49 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *110 %* | *27-119* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *3.25 %* | *7-85* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *99.7 %* | *15-314* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *98.9 %* | *36-141* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *3.52 %* | *1-65* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *7.95 %* | *4-168* | | | *AC04431* | *03/24/20 08:00* | *04/01/20 02:49* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 03:51 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 03:51 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *80.3 %* | *27-119* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 03:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *83.1 %* | *15-314* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 03:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *96.6 %* | *36-141* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 03:51* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 04:26 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 04:26 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *78.0 %* | *27-119* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 04:26* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *82.0 %* | *15-314* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 04:26* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *104 %* | *36-141* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 04:26* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 05:00 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 05:00 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *77.1 %* | *27-119* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *77.8 %* | *15-314* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:00* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *91.8 %* | *36-141* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:00* | *EPA 625.1* | *NBH* | 1551 | |
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 05:34 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04349 | 03/23/20 08:00 | 03/26/20 05:34 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *86.8 %* | *27-119* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:34* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *91.1 %* | *15-314* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:34* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *97.5 %* | *36-141* | | | *AC04349* | *03/23/20 08:00* | *03/26/20 05:34* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1s (20C2261-01) Water Sampled: 03/17/20 13:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 00:41 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *89.2 %* | *24-119* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 00:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *74.2 %* | *15-314* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 00:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *72.7 %* | *37-139* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 00:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:18 | EPA 625.1SIM | NBH | 1551 | QM-15, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-1d (20C2261-02) Water Sampled: 03/17/20 11:55 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *74.5 %* | *24-119* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *67.8 %* | *15-314* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *77.4 %* | *37-139* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-9 (20C2261-03) Water Sampled: 03/17/20 14:00 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 01:56 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *94.2 %* | *24-119* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:56* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *96.2 %* | *15-314* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:56* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *82.7 %* | *37-139* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 01:56* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUP (20C2261-04) Water Sampled: 03/17/20 14:30 Received: 03/17/20 22:10** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03066 | 03/24/20 08:00 | 04/03/20 02:34 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *89.9 %* | *24-119* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 02:34* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *86.0 %* | *15-314* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 02:34* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *109 %* | *37-139* | | | *AD03066* | *03/24/20 08:00* | *04/03/20 02:34* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04293 - General Prep** | | | | | | | | | | | |
| **Blank (AC04293-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04293-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.77 | 0.30 | 1.0 | ug/L | 10.0 | | 97.7 | 90-110 | | | |
| **Duplicate (AC04293-DUP1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 0.435 | 0.30 | 1.0 | ug/L | | 0.406 | | | 6.90 | 20 | J |
| **Matrix Spike (AC04293-MS1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.82 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 94.2 | 90-110 | | | |
| **Matrix Spike (AC04293-MS2)** | | **Source: 20C2038-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04293-MSD1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 10.0 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 96.4 | 90-110 | 2.22 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC04651-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04651-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.6 | 0.050 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Cadmium | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead | 18.4 | 0.060 | 0.25 | ug/L | 20.0 | | 92.0 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Thallium | 18.6 | 0.050 | 0.10 | ug/L | 20.0 | | 93.1 | 85-115 | | | |
| Zinc | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AC04651-DUP1)** | | | **Source: 20C3166-02** | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 2.22 | 1.6 | 2.0 | ug/L | | 2.11 | | | 5.08 | 20 | |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 2.40 | 1.6 | 2.0 | ug/L | | 2.45 | | | 2.05 | 20 | |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 3.36 | 1.2 | 2.0 | ug/L | | 3.23 | | | 3.89 | 20 | |
| Selenium | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Silver | ND | 0.050 | 0.10 | ug/L | | 0.0500 | | | 200 | 20 | U |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 41.7 | 16 | 20 | ug/L | | 41.6 | | | 0.327 | 20 | |
| **Matrix Spike (AC04651-MS1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 21.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Arsenic | 23.5 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 107 | 70-130 | | | |
| Beryllium | 22.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 18.7 | 2.0 | 2.0 | ug/L | 20.0 | ND | 93.5 | 70-130 | | | |
| Copper | 24.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | | | |
| Lead | 18.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 91.8 | 70-130 | | | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 95.7 | 70-130 | | | |
| Selenium | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 97.7 | 70-130 | | | |
| Thallium | 18.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Zinc | 143 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | | | |
| **Matrix Spike (AC04651-MS2)** | | **Source: 20C2440-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.1 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 21.5 | 1.6 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Beryllium | 21.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.8 | 70-130 | | | |
| Chromium | 20.2 | 2.0 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper | 23.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.32 | 103 | 70-130 | | | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Nickel | 20.9 | 1.2 | 2.0 | ug/L | 20.0 | 2.15 | 93.6 | 70-130 | | | |
| Selenium | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | 0.663 | 100 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Thallium | 18.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 92.0 | 70-130 | | | |
| Zinc | 107 | 16 | 20 | ug/L | 100 | ND | 107 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04651-MSD1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.56 | 20 | |
| Arsenic | 23.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 105 | 70-130 | 1.37 | 20 | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 110 | 70-130 | 2.14 | 20 | |
| Cadmium | 19.9 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.3 | 70-130 | 3.21 | 20 | |
| Chromium | 19.4 | 2.0 | 2.0 | ug/L | 20.0 | ND | 96.8 | 70-130 | 3.53 | 20 | |
| Copper | 24.1 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | 0.166 | 20 | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | 1.19 | 20 | |
| Nickel | 22.5 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 96.4 | 70-130 | 0.607 | 20 | |
| Selenium | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 100 | 70-130 | 0.781 | 20 | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 95.5 | 70-130 | 2.20 | 20 | |
| Thallium | 18.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 91.7 | 70-130 | 2.12 | 20 | |
| Zinc | 142 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | 0.651 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04356 - General Prep** | | | | | | | | | | | |
| **Blank (AC04356-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04356-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | | 98.0 | 90-110 | | | |
| **Duplicate (AC04356-DUP1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04356-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.9 | 90-110 | | | |
| **Matrix Spike (AC04356-MS2)** | | **Source: 20C2474-04** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.9 | 0.30 | 1.0 | ug/L | 10.0 | 1.20 | 97.3 | 90-110 | | | |
| **Matrix Spike Dup (AC04356-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 1.83 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04255-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | 0.474 | 0.40 | 0.50 | ug/L | | | | | | | J |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0706 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04255-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.0 | 0.20 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Arsenic, dissolved | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Beryllium, dissolved | 20.9 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 20.4 | 0.060 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Chromium, dissolved | 21.3 | 0.50 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Copper, dissolved | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 85-115 | | | |
| Lead, dissolved | 20.6 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Selenium, dissolved | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 98.2 | 4.0 | 5.0 | ug/L | 100 | | 98.2 | 85-115 | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 4.09 | 3.0 | 5.0 | ug/L | | 4.04 | | | 1.09 | 20 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/31/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC04255-MRL1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 0.864 | 0.20 | 0.50 | ug/L | 0.800 | | 108 | 0-200 | | | |
| Arsenic, dissolved | 0.737 | 0.40 | 0.50 | ug/L | 0.800 | | 92.1 | 0-200 | | | |
| Beryllium, dissolved | 0.170 | 0.050 | 0.10 | ug/L | 0.160 | | 106 | 0-200 | | | |
| Cadmium, dissolved | 0.159 | 0.060 | 0.10 | ug/L | 0.160 | | 99.1 | 0-200 | | | |
| Chromium, dissolved | 1.02 | 0.50 | 0.50 | ug/L | 0.800 | | 128 | 0-200 | | | |
| Copper, dissolved | 1.19 | 0.40 | 0.50 | ug/L | 0.800 | | 148 | 0-200 | | | |
| Lead, dissolved | 0.418 | 0.060 | 0.25 | ug/L | 0.400 | | 104 | 0-200 | | | |
| Nickel, dissolved | 0.835 | 0.30 | 0.50 | ug/L | 0.800 | | 104 | 0-200 | | | |
| Selenium, dissolved | 0.754 | 0.30 | 2.0 | ug/L | 0.800 | | 94.3 | 0-200 | | | J |
| Silver, dissolved | 0.188 | 0.050 | 0.10 | ug/L | 0.160 | | 117 | 0-200 | | | |
| Thallium, dissolved | 0.162 | 0.050 | 0.10 | ug/L | 0.160 | | 101 | 0-200 | | | |
| Zinc, dissolved | 7.69 | 4.0 | 5.0 | ug/L | 8.00 | | 96.1 | 0-200 | | | |
| **Matrix Spike (AC04255-MS1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.1 | 2.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Arsenic, dissolved | 22.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 114 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 23.3 | 0.12 | 0.20 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Chromium, dissolved | 20.3 | 5.0 | 5.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 19.8 | 0.60 | 2.5 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Nickel, dissolved | 24.3 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 101 | 70-130 | | | |
| Selenium, dissolved | 22.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Silver, dissolved | 22.5 | 0.10 | 0.20 | ug/L | 20.0 | ND | 113 | 70-130 | | | |
| Thallium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.1 | 70-130 | | | |
| Zinc, dissolved | 99.3 | 40 | 50 | ug/L | 100 | ND | 99.3 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AC04255-MS2)** | | **Source: 20C2261-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 20.7 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 23.1 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 18.7 | 0.12 | 0.20 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Chromium, dissolved | 16.2 | 5.0 | 5.0 | ug/L | 20.0 | ND | 80.9 | 70-130 | | | |
| Copper, dissolved | 20.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Lead, dissolved | 19.6 | 0.60 | 2.5 | ug/L | 20.0 | ND | 97.9 | 70-130 | | | |
| Nickel, dissolved | 29.9 | 3.0 | 5.0 | ug/L | 20.0 | 10.3 | 97.9 | 70-130 | | | |
| Selenium, dissolved | 19.1 | 0.60 | 4.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.6 | 70-130 | | | |
| Thallium, dissolved | 19.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.3 | 70-130 | | | |
| Zinc, dissolved | 99.1 | 40 | 50 | ug/L | 100 | ND | 99.1 | 70-130 | | | |
| **Matrix Spike Dup (AC04255-MSD1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.3 | 2.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 0.798 | 20 | |
| Arsenic, dissolved | 23.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | 2.03 | 20 | |
| Beryllium, dissolved | 21.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 105 | 70-130 | 2.14 | 20 | |
| Cadmium, dissolved | 19.2 | 0.12 | 0.20 | ug/L | 20.0 | ND | 96.2 | 70-130 | 18.9 | 20 | |
| Chromium, dissolved | 22.0 | 5.0 | 5.0 | ug/L | 20.0 | ND | 110 | 70-130 | 7.84 | 20 | |
| Copper, dissolved | 20.6 | 4.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 3.17 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.66 | 20 | |
| Nickel, dissolved | 24.5 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 102 | 70-130 | 0.565 | 20 | |
| Selenium, dissolved | 19.7 | 0.60 | 4.0 | ug/L | 20.0 | ND | 98.6 | 70-130 | 12.5 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 93.1 | 70-130 | 18.8 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 2.99 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 1.56 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03177 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03177-BLK1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03177-BS1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 4.63 | 0.200 | 0.500 | ng/l | 5.00 | | 92.6 | 77-123 | | | |
| **Matrix Spike (AD03177-MS1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 24.5 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 92.4 | 71-125 | | | |
| **Matrix Spike (AD03177-MS2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 91.7 | 71-125 | | | |
| **Matrix Spike Dup (AD03177-MSD1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.1 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 86.7 | 71-125 | 5.97 | 24 | |
| **Matrix Spike Dup (AD03177-MSD2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 90.9 | 71-125 | 0.907 | 24 | |
| **Reference (AD03177-SRM1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 46.1 | 0.200 | 0.500 | ng/l | 50.0 | | 92.2 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Reference (AD03694-SRM1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 46.7 | 0.200 | 0.500 | ng/l | 50.0 | | 93.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04736 - General Preparation** | | | | | | | | | | | |
| **Blank (AC04736-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AC04736-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | | 106 | 85-115 | | | |
| **Duplicate (AC04736-DUP1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | 0.00223 | | | 200 | 25 | U |
| **Matrix Spike (AC04736-MS1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.209 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00223 | 103 | 85-115 | | | |
| **Matrix Spike (AC04736-MS2)** | | **Source: 20C2318-01** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.222 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 111 | 85-115 | | | |
| **Matrix Spike Dup (AC04736-MSD1)** | | **Source: 20C2091-04** | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Cyanide (total) | 0.211 | 0.0020 | 0.0030 | mg/L | 0.200 | 0.00223 | 105 | 85-115 | 1.30 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04350 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04350-BLK1)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *67.7* | | | *ug/L* | *57.4* | | *118* | *39-120* | | | |
| **LCS (AC04350-BS1)** | | | | | Prepared: 03/23/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1310 | 50 | 250 | ug/L | 2100 | | 62.4 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *43.4* | | | *ug/L* | *57.4* | | *75.6* | *39-120* | | | |
| **LCS (AC04350-BS2)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Motor Oil | 1500 | 100 | 250 | ug/L | 2010 | | 74.6 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *53.7* | | | *ug/L* | *57.4* | | *93.6* | *39-120* | | | |
| **LCS Dup (AC04350-BSD1)** | | | | | Prepared: 03/23/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1610 | 50 | 250 | ug/L | 2100 | | 76.8 | 61-120 | 20.8 | 25 | |
| *Surrogate: Tetratetracontane* | *44.2* | | | *ug/L* | *57.4* | | *77.0* | *39-120* | | | |
| **LCS Dup (AC04350-BSD2)** | | | | | Prepared: 03/23/20 Analyzed: 03/30/20 | | | | | | |
| TPH as Motor Oil | 1520 | 100 | 250 | ug/L | 2010 | | 75.8 | 71-125 | 1.51 | 25 | |
| *Surrogate: Tetratetracontane* | *65.3* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05006 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05006-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *76-129* | | | |
| **LCS (AC05006-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 152 | 50 | 50 | ug/L | 200 | | 75.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **LCS Dup (AC05006-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 173 | 50 | 50 | ug/L | 200 | | 86.5 | 67-132 | 13.2 | 25 | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *76-129* | | | |
| **Matrix Spike (AC05006-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 174 | 50 | 50 | ug/L | 200 | ND | 87.2 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC05006-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 159 | 50 | 50 | ug/L | 200 | ND | 79.5 | 37-156 | 9.24 | 25 | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *97.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 64.2 | 2.0 | 5.0 | ug/L | 50.0 | | 128 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 68.3 | 2.0 | 5.0 | ug/L | 50.0 | | 137 | 60-140 | 6.22 | 25 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 53.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 107 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 63.3 | 2.0 | 5.0 | ug/L | 50.0 | ND | 127 | 40-160 | 16.8 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.5 | 0.70 | 1.0 | ug/L | 25.0 | | 110 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.7 | 3-225 | 11.7 | 30 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 29.8 | 0.70 | 1.0 | ug/L | 25.0 | ND | 119 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 110 | 3-305 | 8.39 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05007-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05007-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.9 | 0.30 | 0.30 | ug/L | 20.0 | | 99.6 | 65-135 | | | |
| Bromoform | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Carbon tetrachloride | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | | | |
| Chlorobenzene | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.0 | 65-135 | | | |
| Dibromochloromethane | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-135 | | | |
| Chloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.6 | 40-160 | | | |
| Chloroform | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-135 | | | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | | | |
| 1,1-Dichloroethene | 18.0 | 0.30 | 0.50 | ug/L | 20.0 | | 90.1 | 50-150 | | | |
| 1,2-Dichloropropane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | | 90.2 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.0 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 50-150 | | | |
| Ethylbenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 60-140 | | | |
| Bromomethane | 16.4 | 0.40 | 0.50 | ug/L | 20.0 | | 81.8 | 15-185 | | | |
| Chloromethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 2-205 | | | |
| Methylene chloride | 19.2 | 0.50 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.5 | 0.30 | 0.50 | ug/L | 20.0 | | 97.3 | 60-140 | | | |
| Tetrachloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| Toluene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | | | |
| Trichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.7 | 65-135 | | | |
| Vinyl chloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 65-135 | | | |
| 1,3-Dichlorobenzene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.5 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC05007-BSD1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 120 | 60-140 | 0.672 | 25 | |
| Benzene | 20.9 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 65-135 | 4.66 | 25 | |
| Bromoform | 22.9 | 0.30 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | 6.62 | 25 | |
| Carbon tetrachloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 4.66 | 25 | |
| Chlorobenzene | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 3.26 | 25 | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | | 121 | 70-135 | 7.17 | 25 | |
| Chloroethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.6 | 40-160 | 2.37 | 25 | |
| Chloroform | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-135 | 4.04 | 25 | |
| Bromodichloromethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | 3.81 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.88 | 25 | |
| 1,2-Dichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.10 | 25 | |
| 1,1-Dichloroethene | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | | 96.7 | 50-150 | 7.07 | 25 | |
| 1,2-Dichloropropane | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 35-165 | 2.90 | 25 | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.8 | 25-175 | 4.17 | 25 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 50-150 | 6.56 | 25 | |
| Ethylbenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 5.44 | 25 | |
| Bromomethane | 18.2 | 0.40 | 0.50 | ug/L | 20.0 | | 91.2 | 15-185 | 10.8 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 2-205 | 4.98 | 25 | |
| Methylene chloride | 19.7 | 0.50 | 0.50 | ug/L | 20.0 | | 98.5 | 60-140 | 2.62 | 25 | |
| 1,1,2,2-Tetrachloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.57 | 25 | |
| Tetrachloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.68 | 25 | |
| Toluene | 21.6 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 70-130 | 5.52 | 25 | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | 3.41 | 25 | |
| 1,1,1-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 8.60 | 25 | |
| 1,1,2-Trichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 4.00 | 25 | |
| Trichloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 4.55 | 25 | |
| Vinyl chloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.6 | 5-195 | 3.16 | 25 | |
| 1,2-Dichlorobenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 65-135 | 3.81 | 25 | |
| 1,3-Dichlorobenzene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 4.04 | 25 | |
| 1,4-Dichlorobenzene | 20.1 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 0.150 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05007-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | | | |
| Benzene | 22.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 111 | 37-151 | | | |
| Bromoform | 21.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 45-169 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 70-140 | | | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 53-149 | | | |
| Chloroethane | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.6 | 14-230 | | | |
| Chloroform | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 51-138 | | | |
| Bromodichloromethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 35-155 | | | |
| 1,1-Dichloroethane | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 59-155 | | | |
| 1,2-Dichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 49-155 | | | |
| 1,1-Dichloroethene | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.7 | 2-210 | | | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 91.8 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.2 | 17-183 | | | |
| Ethylbenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 37-162 | | | |
| Bromomethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 2-242 | | | |
| Chloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 2-273 | | | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.2 | 46-157 | | | |
| Tetrachloroethene | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | | | |
| Toluene | 22.6 | 0.30 | 0.30 | ug/L | 20.0 | ND | 113 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 52-150 | | | |
| Trichloroethene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 70-157 | | | |
| Vinyl chloride | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 2-251 | | | |
| 1,2-Dichlorobenzene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.0 | 0.10 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05007-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 113 | 40-160 | 3.77 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 0.898 | 61 | |
| Bromoform | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 45-169 | 7.64 | 42 | |
| Carbon tetrachloride | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | 5.44 | 41 | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0488 | 53 | |
| Dibromochloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 53-149 | 2.77 | 50 | |
| Chloroethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 14-230 | 4.35 | 78 | |
| Chloroform | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 51-138 | 1.10 | 54 | |
| Bromodichloromethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 35-155 | 4.65 | 56 | |
| 1,1-Dichloroethane | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | 1.94 | 40 | |
| 1,2-Dichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 49-155 | 2.11 | 49 | |
| 1,1-Dichloroethene | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 2-234 | 1.37 | 32 | |
| 1,2-Dichloropropane | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.4 | 2-210 | 3.87 | 55 | |
| cis-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.0 | 2-227 | 5.56 | 58 | |
| trans-1,3-Dichloropropene | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 17-183 | 3.44 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 4.37 | 63 | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-242 | 7.58 | 61 | |
| Chloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 2-273 | 0.502 | 60 | |
| Methylene chloride | 20.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 103 | 2-221 | 3.01 | 28 | |
| 1,1,2,2-Tetrachloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 46-157 | 2.05 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 0.446 | 39 | |
| Toluene | 23.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 1.97 | 41 | |
| trans-1,2-Dichloroethene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | 0.655 | 45 | |
| 1,1,1-Trichloroethane | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 52-162 | 1.41 | 36 | |
| 1,1,2-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-150 | 0.599 | 45 | |
| Trichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 70-157 | 1.94 | 48 | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | 6.33 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 1.88 | 57 | |
| 1,3-Dichlorobenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 59-156 | 3.18 | 43 | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | 2.22 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04431-BLK1)** | | | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | 0.420 | 0.30 | 2.0 | ug/L | | | | | | | J |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 2.94 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04431-BLK1)** | | | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *35.0* | | | *ug/L* | *40.0* | | *87.5* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.7* | | | *ug/L* | *40.0* | | *44.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.5* | | | *ug/L* | *40.0* | | *83.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *44.2* | | | *ug/L* | *40.0* | | *111* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *17.4* | | | *ug/L* | *40.0* | | *43.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *35.3* | | | *ug/L* | *40.0* | | *88.3* | *4-168* | | | |
| **LCS (AC04431-BS1)** | | | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| 2-Chlorophenol | 22.5 | 0.70 | 5.0 | ug/L | 40.0 | | 56.2 | 36-120 | | | |
| 2,4-Dichlorophenol | 26.0 | 0.70 | 5.0 | ug/L | 40.0 | | 65.0 | 53-122 | | | |
| 2,4-Dimethylphenol | 23.4 | 1.0 | 2.0 | ug/L | 50.0 | | 46.7 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 38.4 | 3.0 | 5.0 | ug/L | 40.0 | | 95.9 | 53-130 | | | |
| 2,4-Dinitrophenol | 36.3 | 5.0 | 5.0 | ug/L | 50.0 | | 72.6 | 10-173 | | | |
| 2-Nitrophenol | 23.4 | 0.90 | 10 | ug/L | 40.0 | | 58.6 | 45-167 | | | |
| 4-Nitrophenol | 12.6 | 3.0 | 10 | ug/L | 40.0 | | 31.5 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 32.8 | 1.0 | 1.0 | ug/L | 40.0 | | 82.0 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 22.1 | 0.60 | 5.0 | ug/L | 40.0 | | 55.2 | 36-102 | | | |
| Pentachlorophenol | 34.0 | 4.0 | 5.0 | ug/L | 40.0 | | 85.1 | 38-152 | | | |
| Phenol | 10.4 | 0.50 | 1.0 | ug/L | 40.0 | | 26.0 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 25.0 | 0.70 | 10 | ug/L | 40.0 | | 62.4 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 32.7 | 0.90 | 5.0 | ug/L | 40.0 | | 81.8 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 28.6 | 0.90 | 1.0 | ug/L | 40.0 | | 71.6 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 26.0 | 1.0 | 2.0 | ug/L | 40.0 | | 65.0 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 36.4 | 3.0 | 5.0 | ug/L | 40.0 | | 91.0 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 35.8 | 1.0 | 5.0 | ug/L | 40.0 | | 89.6 | 65-120 | | | |
| Butyl benzyl phthalate | 20.0 | 0.60 | 10 | ug/L | 40.0 | | 50.0 | 2-140 | | | |
| 2-Chloronaphthalene | 30.1 | 0.60 | 10 | ug/L | 40.0 | | 75.3 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 30.3 | 0.90 | 5.0 | ug/L | 40.0 | | 75.7 | 38-145 | | | |
| 1,3-Dichlorobenzene | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | | 59.0 | 31-92 | | | |
| 1,2-Dichlorobenzene | 23.1 | 0.60 | 2.0 | ug/L | 40.0 | | 57.8 | 33-93 | | | |
| 1,4-Dichlorobenzene | 23.5 | 0.60 | 1.0 | ug/L | 40.0 | | 58.8 | 32-91 | | | |
| Diethyl phthalate | 24.0 | 0.30 | 2.0 | ug/L | 40.0 | | 60.0 | 2-120 | | | |
| Dimethyl phthalate | 14.4 | 0.80 | 2.0 | ug/L | 40.0 | | 36.0 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04431-BS1)** | | | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| Di-n-butyl phthalate | 32.0 | 0.90 | 10 | ug/L | 40.0 | | 80.0 | 8-120 | | | |
| 2,4-Dinitrotoluene | 29.9 | 0.80 | 5.0 | ug/L | 40.0 | | 74.8 | 48-127 | | | |
| 2,6-Dinitrotoluene | 32.2 | 0.80 | 5.0 | ug/L | 40.0 | | 80.6 | 68-137 | | | |
| Di-n-octyl phthalate | 14.3 | 0.60 | 10 | ug/L | 40.0 | | 35.7 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 37.2 | 0.60 | 1.0 | ug/L | 40.0 | | 93.1 | 52-115 | | | |
| Hexachlorobenzene | 34.0 | 0.90 | 1.0 | ug/L | 40.0 | | 85.0 | 8-142 | | | |
| Hexachlorobutadiene | 24.6 | 0.80 | 1.0 | ug/L | 40.0 | | 61.6 | 38-120 | | | |
| Hexachlorocyclopentadiene | 22.2 | 4.0 | 5.0 | ug/L | 40.0 | | 55.6 | 16-93 | | | |
| Hexachloroethane | 22.2 | 0.60 | 1.0 | ug/L | 40.0 | | 55.6 | 55-120 | | | |
| Isophorone | 33.4 | 0.30 | 1.0 | ug/L | 40.0 | | 83.4 | 47-180 | | | |
| Nitrobenzene | 27.3 | 0.90 | 1.0 | ug/L | 40.0 | | 68.2 | 54-158 | | | |
| N-Nitrosodimethylamine | 21.9 | 0.30 | 5.0 | ug/L | 40.0 | | 54.7 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 30.0 | 0.80 | 5.0 | ug/L | 40.0 | | 75.1 | 14-198 | | | |
| N-Nitrosodiphenylamine | 34.7 | 1.0 | 1.0 | ug/L | 40.0 | | 86.8 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 24.5 | 0.60 | 5.0 | ug/L | 40.0 | | 61.2 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.5* | | | *ug/L* | *40.0* | | *101* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *18.5* | | | *ug/L* | *40.0* | | *46.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.4* | | | *ug/L* | *40.0* | | *83.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.0* | | | *ug/L* | *40.0* | | *87.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.2* | | | *ug/L* | *40.0* | | *35.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.6* | | | *ug/L* | *40.0* | | *94.0* | *4-168* | | | |
| **Matrix Spike (AC04431-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| 2-Chlorophenol | 35.3 | 0.70 | 5.0 | ug/L | 40.0 | ND | 88.3 | 23-134 | | | |
| 2,4-Dichlorophenol | 34.9 | 0.70 | 5.0 | ug/L | 40.0 | ND | 87.3 | 39-135 | | | |
| 2,4-Dimethylphenol | 14.9 | 1.0 | 2.0 | ug/L | 50.0 | ND | 29.9 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 48.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 122 | 7-181 | | | |
| 2,4-Dinitrophenol | 43.2 | 5.0 | 5.0 | ug/L | 50.0 | ND | 86.3 | 10-191 | | | |
| 2-Nitrophenol | 35.3 | 0.90 | 10 | ug/L | 40.0 | ND | 88.2 | 29-182 | | | |
| 4-Nitrophenol | 25.4 | 3.0 | 10 | ug/L | 40.0 | ND | 63.4 | 7-132 | | | |
| 4-Chloro-3-methylphenol | 40.1 | 1.0 | 1.0 | ug/L | 40.0 | ND | 100 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 34.4 | 0.60 | 5.0 | ug/L | 40.0 | ND | 85.9 | 9-124 | | | |
| Pentachlorophenol | 40.3 | 4.0 | 5.0 | ug/L | 40.0 | ND | 101 | 14-176 | | | |
| Phenol | 29.6 | 0.50 | 1.0 | ug/L | 40.0 | ND | 74.1 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 35.0 | 0.70 | 10 | ug/L | 40.0 | ND | 87.6 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 36.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 91.8 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 36.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 91.8 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04431-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 03/31/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 33.8 | 1.0 | 2.0 | ug/L | 40.0 | ND | 84.5 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 39.0 | 3.0 | 5.0 | ug/L | 40.0 | ND | 97.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 39.4 | 1.0 | 5.0 | ug/L | 40.0 | ND | 98.4 | 53-127 | | | |
| Butyl benzyl phthalate | 13.7 | 0.60 | 10 | ug/L | 40.0 | ND | 34.2 | 2-152 | | | |
| 2-Chloronaphthalene | 36.3 | 0.60 | 10 | ug/L | 40.0 | ND | 90.8 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 35.2 | 0.90 | 5.0 | ug/L | 40.0 | ND | 88.1 | 25-158 | | | |
| 1,3-Dichlorobenzene | 32.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 80.5 | 1-106 | | | |
| 1,4-Dichlorobenzene | 31.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 78.1 | 3-105 | | | |
| 1,2-Dichlorobenzene | 32.3 | 0.60 | 2.0 | ug/L | 40.0 | ND | 80.8 | 7-104 | | | |
| Diethyl phthalate | 15.9 | 0.30 | 2.0 | ug/L | 40.0 | 0.580 | 38.4 | 2-120 | | | |
| Dimethyl phthalate | 4.14 | 0.80 | 2.0 | ug/L | 40.0 | ND | 10.4 | 2-120 | | | |
| Di-n-butyl phthalate | 32.2 | 0.90 | 10 | ug/L | 40.0 | 3.82 | 70.9 | 1-120 | | | |
| 2,4-Dinitrotoluene | 38.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 95.8 | 39-139 | | | |
| 2,6-Dinitrotoluene | 39.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 99.8 | 50-158 | | | |
| Di-n-octyl phthalate | 13.8 | 0.60 | 10 | ug/L | 40.0 | ND | 34.4 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 40.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 102 | 39-116 | | | |
| Hexachlorobenzene | 38.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 95.0 | 2-152 | | | |
| Hexachlorobutadiene | 29.4 | 0.80 | 1.0 | ug/L | 40.0 | ND | 73.4 | 24-120 | | | |
| Hexachlorocyclopentadiene | 21.6 | 4.0 | 5.0 | ug/L | 40.0 | ND | 54.0 | 10-93 | | | |
| Hexachloroethane | 30.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 76.3 | 40-120 | | | |
| Isophorone | 37.9 | 0.30 | 1.0 | ug/L | 40.0 | ND | 94.8 | 21-196 | | | |
| Nitrobenzene | 33.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 84.3 | 35-180 | | | |
| N-Nitrosodimethylamine | 28.0 | 0.30 | 5.0 | ug/L | 40.0 | ND | 70.0 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 40.2 | 0.80 | 5.0 | ug/L | 40.0 | ND | 100 | 2-230 | | | |
| N-Nitrosodiphenylamine | 37.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 93.6 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 30.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 77.3 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.8* | | | *ug/L* | *40.0* | | *102* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *32.4* | | | *ug/L* | *40.0* | | *81.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.4* | | | *ug/L* | *40.0* | | *98.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *44.5* | | | *ug/L* | *40.0* | | *111* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *32.6* | | | *ug/L* | *40.0* | | *81.6* | *1-65* | | | *S-01* |
| *Surrogate: 2,4,6-Tribromophenol* | *42.0* | | | *ug/L* | *40.0* | | *105* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04431-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 04/01/20 | | | | | | |
| 2-Chlorophenol | 29.5 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.7 | 23-134 | 18.1 | 61 | |
| 2,4-Dichlorophenol | 29.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.0 | 39-135 | 17.9 | 50 | |
| 2,4-Dimethylphenol | 10.9 | 1.0 | 2.0 | ug/L | 50.0 | ND | 21.8 | 32-120 | 31.4 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 42.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 106 | 7-181 | 13.7 | 203 | |
| 2,4-Dinitrophenol | 36.5 | 5.0 | 5.0 | ug/L | 50.0 | ND | 73.1 | 10-191 | 16.6 | 132 | |
| 2-Nitrophenol | 30.2 | 0.90 | 10 | ug/L | 40.0 | ND | 75.4 | 29-182 | 15.6 | 55 | |
| 4-Nitrophenol | 25.1 | 3.0 | 10 | ug/L | 40.0 | ND | 62.8 | 7-132 | 0.951 | 131 | |
| 4-Chloro-3-methylphenol | 29.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 73.7 | 22-147 | 30.7 | 73 | |
| 2-Methylphenol (o-cresol) | 26.9 | 0.60 | 5.0 | ug/L | 40.0 | ND | 67.2 | 9-124 | 24.4 | 28 | |
| Pentachlorophenol | 38.8 | 4.0 | 5.0 | ug/L | 40.0 | ND | 97.1 | 14-176 | 3.62 | 86 | |
| Phenol | 23.9 | 0.50 | 1.0 | ug/L | 40.0 | ND | 59.8 | 5-120 | 21.3 | 64 | |
| 2,4,6-Trichlorophenol | 30.4 | 0.70 | 10 | ug/L | 40.0 | ND | 76.0 | 37-144 | 14.1 | 58 | |
| Bis(2-chloroethoxy)methane | 28.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 70.0 | 33-184 | 26.9 | 54 | |
| Bis(2-chloroethyl)ether | 30.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 75.1 | 12-158 | 20.1 | 108 | |
| Bis(2-chloroisopropyl)ether | 26.8 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.0 | 36-166 | 23.2 | 76 | |
| Bis(2-ethylhexyl)phthalate | 34.2 | 3.0 | 5.0 | ug/L | 40.0 | ND | 85.5 | 8-158 | 13.0 | 82 | |
| 4-Bromophenyl phenyl ether | 33.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 82.8 | 53-127 | 17.2 | 43 | |
| Butyl benzyl phthalate | 8.00 | 0.60 | 10 | ug/L | 40.0 | ND | 20.0 | 2-152 | 52.4 | 60 | J |
| 2-Chloronaphthalene | 29.5 | 0.60 | 10 | ug/L | 40.0 | ND | 73.8 | 60-120 | 20.7 | 24 | |
| 4-Chlorophenyl phenyl ether | 29.3 | 0.90 | 5.0 | ug/L | 40.0 | ND | 73.2 | 25-158 | 18.5 | 61 | |
| 1,2-Dichlorobenzene | 25.7 | 0.60 | 2.0 | ug/L | 40.0 | ND | 64.2 | 7-104 | 22.8 | 41 | |
| 1,4-Dichlorobenzene | 25.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 64.6 | 3-105 | 18.9 | 42 | |
| 1,3-Dichlorobenzene | 25.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 62.9 | 1-106 | 24.5 | 41 | |
| Diethyl phthalate | 10.6 | 0.30 | 2.0 | ug/L | 40.0 | 0.580 | 25.0 | 2-120 | 40.2 | 100 | |
| Dimethyl phthalate | 2.52 | 0.80 | 2.0 | ug/L | 40.0 | ND | 6.30 | 2-120 | 48.6 | 183 | |
| Di-n-butyl phthalate | 23.2 | 0.90 | 10 | ug/L | 40.0 | 3.82 | 48.5 | 1-120 | 32.3 | 47 | |
| 2,4-Dinitrotoluene | 28.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 70.2 | 39-139 | 30.8 | 42 | |
| 2,6-Dinitrotoluene | 29.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 74.6 | 50-158 | 28.8 | 48 | |
| Di-n-octyl phthalate | 5.88 | 0.60 | 10 | ug/L | 40.0 | ND | 14.7 | 4-146 | 80.3 | 69 | QM-08, J |
| 1,2-Diphenylhydrazine | 34.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 85.9 | 39-116 | 17.1 | 25 | |
| Hexachlorobenzene | 32.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 80.1 | 2-152 | 17.0 | 55 | |
| Hexachlorobutadiene | 25.3 | 0.80 | 1.0 | ug/L | 40.0 | ND | 63.2 | 24-120 | 15.0 | 62 | |
| Hexachlorocyclopentadiene | 17.1 | 4.0 | 5.0 | ug/L | 40.0 | ND | 42.8 | 10-93 | 23.1 | 55 | |
| Hexachloroethane | 24.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 62.0 | 40-120 | 20.7 | 52 | |
| Isophorone | 27.4 | 0.30 | 1.0 | ug/L | 40.0 | ND | 68.4 | 21-196 | 32.4 | 93 | |
| Nitrobenzene | 25.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 64.8 | 35-180 | 26.1 | 62 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04431 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04431-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 04/01/20 | | | | | | |
| N-Nitrosodimethylamine | 22.6 | 0.30 | 5.0 | ug/L | 40.0 | ND | 56.4 | 10-84 | 21.4 | 59 | |
| N-Nitrosodi-n-propylamine | 27.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 68.9 | 2-230 | 37.2 | 87 | |
| N-Nitrosodiphenylamine | 29.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 74.0 | 40-115 | 23.5 | 25 | |
| 1,2,4-Trichlorobenzene | 25.3 | 0.60 | 5.0 | ug/L | 40.0 | ND | 63.3 | 44-142 | 20.0 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.9* | | | *ug/L* | *40.0* | | *82.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *25.7* | | | *ug/L* | *40.0* | | *64.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.2* | | | *ug/L* | *40.0* | | *75.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.0* | | | *ug/L* | *40.0* | | *70.0* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *26.7* | | | *ug/L* | *40.0* | | *66.8* | *1-65* | | | *S-01* |
| *Surrogate: 2,4,6-Tribromophenol* | *37.1* | | | *ug/L* | *40.0* | | *92.8* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04349 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04349-BLK1)** | | | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *30.9* | | | *ug/L* | *40.0* | | *77.2* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.9* | | | *ug/L* | *40.0* | | *77.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.7* | | | *ug/L* | *40.0* | | *107* | *36-141* | | | |
| **LCS (AC04349-BS1)** | | | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 14.6 | 3.00 | 5.00 | ug/L | 79.4 | | 18.4 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 78.4 | 2.00 | 5.00 | ug/L | 79.4 | | 98.8 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.4* | | | *ug/L* | *40.0* | | *80.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.6* | | | *ug/L* | *40.0* | | *81.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *45.2* | | | *ug/L* | *40.0* | | *113* | *36-141* | | | |
| **Matrix Spike (AC04349-MS1)** | | **Source: 20C2037-02** | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 22.6 | 3.00 | 5.00 | ug/L | 79.4 | ND | 28.5 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 74.2 | 2.00 | 5.00 | ug/L | 79.4 | ND | 93.5 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.2* | | | *ug/L* | *40.0* | | *80.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.2* | | | *ug/L* | *40.0* | | *82.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.6* | | | *ug/L* | *40.0* | | *104* | *36-141* | | | |
| **Matrix Spike Dup (AC04349-MSD1)** | | **Source: 20C2037-02** | | | Prepared: 03/23/20 Analyzed: 03/25/20 | | | | | | |
| Benzidine | 16.3 | 3.00 | 5.00 | ug/L | 79.4 | ND | 20.6 | 4-262 | 32.1 | 108 | |
| 3,3´-Dichlorobenzidine | 69.9 | 2.00 | 5.00 | ug/L | 79.4 | ND | 88.1 | 4-262 | 6.00 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.2* | | | *ug/L* | *40.0* | | *80.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.0* | | | *ug/L* | *40.0* | | *82.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.5* | | | *ug/L* | *40.0* | | *101* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03066 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03066-BLK1)** | | | | | Prepared: 03/24/20 Analyzed: 04/02/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *32.4* | | | *ug/L* | *40.0* | | *81.0* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.6* | | | *ug/L* | *40.0* | | *74.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *36.7* | | | *ug/L* | *40.0* | | *91.8* | *37-139* | | | |
| **LCS (AD03066-BS1)** | | | | | Prepared: 03/24/20 Analyzed: 04/02/20 | | | | | | |
| Acenaphthene | 28.4 | 0.20 | 0.20 | ug/L | 40.0 | | 70.9 | 60-132 | | | |
| Acenaphthylene | 33.0 | 0.20 | 0.20 | ug/L | 40.0 | | 82.5 | 54-126 | | | |
| Anthracene | 24.8 | 0.090 | 0.20 | ug/L | 40.0 | | 62.0 | 43-120 | | | |
| Benzo (a) anthracene | 29.8 | 0.20 | 0.20 | ug/L | 40.0 | | 74.4 | 42-133 | | | |
| Benzo (a) pyrene | 32.7 | 0.20 | 0.20 | ug/L | 40.0 | | 81.8 | 32-148 | | | |
| Benzo (b) fluoranthene | 34.4 | 0.20 | 0.20 | ug/L | 40.0 | | 86.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 36.4 | 0.10 | 0.20 | ug/L | 40.0 | | 91.1 | 2-195 | | | |
| Benzo (k) fluoranthene | 33.8 | 0.20 | 0.20 | ug/L | 40.0 | | 84.5 | 25-146 | | | |
| Chrysene | 29.8 | 0.20 | 0.20 | ug/L | 40.0 | | 74.4 | 44-140 | | | |
| Dibenz (a,h) anthracene | 36.6 | 0.10 | 0.20 | ug/L | 40.0 | | 91.5 | 2-200 | | | |
| Fluoranthene | 35.3 | 0.070 | 0.20 | ug/L | 40.0 | | 88.2 | 43-121 | | | |
| Fluorene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | | 70.3 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 35.6 | 0.030 | 0.20 | ug/L | 40.0 | | 89.0 | 2-151 | | | |
| Naphthalene | 23.9 | 0.090 | 0.20 | ug/L | 40.0 | | 59.8 | 36-120 | | | |
| Phenanthrene | 27.5 | 0.10 | 0.20 | ug/L | 40.0 | | 68.8 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03066 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03066-BS1)** | | | | | Prepared: 03/24/20 Analyzed: 04/02/20 | | | | | | |
| Pyrene | 30.8 | 0.20 | 0.20 | ug/L | 40.0 | | 77.0 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.0* | | | *ug/L* | *40.0* | | *92.6* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.7* | | | *ug/L* | *40.0* | | *69.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.5* | | | *ug/L* | *40.0* | | *83.8* | *37-139* | | | |
| **Matrix Spike (AD03066-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 04/02/20 | | | | | | |
| Acenaphthene | 33.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.8 | 47-145 | | | |
| Acenaphthylene | 36.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.0 | 33-145 | | | |
| Anthracene | 38.9 | 0.090 | 0.20 | ug/L | 40.0 | ND | 97.3 | 27-133 | | | |
| Benzo (a) anthracene | 36.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 91.6 | 33-143 | | | |
| Benzo (a) pyrene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.6 | 17-163 | | | |
| Benzo (b) fluoranthene | 34.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 86.7 | 24-159 | | | |
| Benzo (g,h,i) perylene | 34.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 86.1 | 2-219 | | | |
| Benzo (k) fluoranthene | 33.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 84.7 | 11-162 | | | |
| Chrysene | 33.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.4 | 17-168 | | | |
| Dibenz (a,h) anthracene | 35.2 | 0.10 | 0.20 | ug/L | 40.0 | ND | 87.9 | 2-227 | | | |
| Fluoranthene | 42.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 107 | 26-137 | | | |
| Fluorene | 30.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 75.3 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 34.2 | 0.030 | 0.20 | ug/L | 40.0 | ND | 85.6 | 2-171 | | | |
| Naphthalene | 36.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 91.8 | 21-133 | | | |
| Phenanthrene | 32.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 79.9 | 54-120 | | | |
| Pyrene | 44.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 110 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *33.6* | | | *ug/L* | *40.0* | | *84.0* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *44.8* | | | *ug/L* | *40.0* | | *112* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *46.5* | | | *ug/L* | *40.0* | | *116* | *37-139* | | | |
| **Matrix Spike Dup (AD03066-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 04/03/20 | | | | | | |
| Acenaphthene | 27.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.0 | 47-145 | 19.6 | 48 | |
| Acenaphthylene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.4 | 33-145 | 18.5 | 74 | |
| Anthracene | 30.5 | 0.090 | 0.20 | ug/L | 40.0 | ND | 76.3 | 27-133 | 24.2 | 66 | |
| Benzo (a) anthracene | 27.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 69.5 | 33-143 | 27.5 | 53 | |
| Benzo (a) pyrene | 42.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 106 | 17-163 | 25.9 | 72 | |
| Benzo (b) fluoranthene | 45.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 114 | 24-159 | 27.3 | 71 | |
| Benzo (g,h,i) perylene | 50.2 | 0.10 | 0.20 | ug/L | 40.0 | ND | 126 | 2-219 | 37.3 | 97 | |
| Benzo (k) fluoranthene | 41.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 104 | 11-162 | 20.0 | 63 | |
| Chrysene | 28.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.6 | 17-168 | 15.2 | 87 | |
| Dibenz (a,h) anthracene | 51.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 130 | 2-227 | 38.4 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 08:30 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03066 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03066-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/24/20 Analyzed: 04/03/20 | | | | | | |
| Fluoranthene | 32.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 82.3 | 26-137 | 25.7 | 66 | |
| Fluorene | 24.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 61.7 | 59-121 | 19.8 | 38 | |
| Indeno (1,2,3-cd) pyrene | 49.0 | 0.030 | 0.20 | ug/L | 40.0 | ND | 122 | 2-171 | 35.5 | 99 | |
| Naphthalene | 27.2 | 0.090 | 0.20 | ug/L | 40.0 | ND | 68.0 | 21-133 | 29.8 | 65 | |
| Phenanthrene | 28.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 72.2 | 54-120 | 10.1 | 39 | |
| Pyrene | 20.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 50.7 | 52-120 | 73.7 | 49 | QM-05, QM-08 |
| *Surrogate: 2-Fluorobiphenyl* | *26.7* | | | *ug/L* | *40.0* | | *66.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.6* | | | *ug/L* | *40.0* | | *76.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *20.6* | | | *ug/L* | *40.0* | | *51.4* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 08:30 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-01 | The surrogate recovery for this sample is outside of established control limits. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C2261



| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

1.9°C Ukiah

**Analysis Request**

**Sample Notes**

**TAT**

24 hr ○ 48 hr ○ Lab Approval Required

1 wk ○ 2 wk (standard) ⊗

Lab Approval Required For Rush

Field Sampler - Print Name & Signature: David Walter David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | 3-17-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | 3-17-2020 | 1155 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | 3-17-2020 | 1400 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| (DW) ~~BKGD-1~~ DUP | 3-17-2020 | 1430 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-17-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/17/20 | 1605 |
| | | 3-17-20 | 19:30 |
| | | 3-17-2020 | 22:10 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

**WORK ORDER**

**20C2261**



**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | | | |
|---|---|---|---|
| **Client:** | **Golder Associates - Sunnyvale** | **Project Manager:** | **Robbie C. Phillips** |
| **Project:** | **EMSA/WMSA Sampling** | **Project Number:** | **Ground Water** |

| | | | |
|---|---|---|---|
| Date Due: | 04/01/20 15:00 (10 day TAT) | | |
| Received By: | Pete L. Hathaway | Date Received: | 03/17/20 22:10 |
| Logged In By: | Leslie M. Quinn | Date Logged In: | 03/17/20 22:58 |

Samples Received at: 5.8 deg C

All containers intact: YES NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C2261-01 EMSA-DMW-1s [Water] Sampled 03/17/20 13:00 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 | BAL Metals | 04/14/20 13:00 | | |
| **20C2261-01 EMSA-DMW-1s [Water] Sampled 03/17/20 13:00 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/14/20 13:00 | | |
| **20C2261-02 EMSA-DMW-1d [Water] Sampled 03/17/20 11:55 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 | BAL Metals | 04/14/20 11:55 | | |
| **20C2261-02 EMSA-DMW-1d [Water] Sampled 03/17/20 11:55 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/14/20 11:55 | | |
| **20C2261-03 EMSA-DMW-9 [Water] Sampled 03/17/20 14:00 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/14/20 14:00 | | |
| **20C2261-03 EMSA-DMW-9 [Water] Sampled 03/17/20 14:00 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/14/20 14:00 | | |
| **20C2261-04 DUP [Water] Sampled 03/17/20 14:30 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/14/20 14:30 | | |
| **20C2261-04 DUP [Water] Sampled 03/17/20 14:30 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/14/20 14:30 | | |

| | | | | | |
|---|---|---|---|---|---|
| Leslie M Quinn | 3-18-20 | | CH | 3-18-20 | 12:55 |
| Relinquished By | Date | Time | Received By | Date | Time |
| CH | 3-18-20 | 1626 | VW | 3/18/20 | 1609 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C2474

Enclosed are the results of analyses for samples received by the laboratory on 03/18/20 21:16. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Surface Water | 04/14/20 11:17 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-SW-A | 20C2474-01 | Water | 03/18/20 12:00 | 03/18/20 21:16 |
| EMSA-SW-B | 20C2474-02 | Water | 03/18/20 13:00 | 03/18/20 21:16 |
| EMSA-SW-C | 20C2474-03 | Water | 03/18/20 14:30 | 03/18/20 21:16 |
| EMSA-SW-D | 20C2474-04 | Water | 03/18/20 15:45 | 03/18/20 21:16 |
| Trip Blank - Surface Water | 20C2474-05 | Water | 03/18/20 00:00 | 03/18/20 21:16 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent** | **0.67** | **0.30** | **1.0** | **ug/L** | 1 | AC04293 | 03/20/20 02:34 | 03/20/20 02:34 | EPA 218.6 | LRN | 1551 | J |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent** | **1.1** | **0.30** | **1.0** | **ug/L** | 1 | AC04293 | 03/20/20 02:53 | 03/20/20 02:53 | EPA 218.6 | LRN | 1551 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent** | **0.94** | **0.30** | **1.0** | **ug/L** | 1 | AC04293 | 03/20/20 03:12 | 03/20/20 03:12 | EPA 218.6 | LRN | 1551 | J |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent** | **0.99** | **0.30** | **1.0** | **ug/L** | 1 | AC04293 | 03/20/20 03:30 | 03/20/20 03:30 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:50 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:30 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:50 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:50 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **5.2** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:50 | EPA 200.8 | SMP | 1551 | |
| **Selenium** | **4.4** | **0.60** | **4.0** | **ug/L** | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:30 | EPA 200.8 | SMP | 1551 | |
| **Silver** | **0.13** | **0.10** | **0.20** | **ug/L** | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:30 | EPA 200.8 | SMP | 1551 | R-01, J |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:50 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Copper** | **9.2** | **4.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:45 | EPA 200.8 | SMP | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **7.9** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:59 | EPA 200.8 | SMP | 1551 | |
| **Selenium** | **7.0** | **0.60** | **4.0** | **ug/L** | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:47 | EPA 200.8 | SMP | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 02:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 04:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:45 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:04 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **9.1** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:07 | EPA 200.8 | SMP | 1551 | |
| **Selenium** | **5.7** | **0.60** | **4.0** | **ug/L** | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:04 | EPA 200.8 | SMP | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:04 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:03 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:03 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:03 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **8.9** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 04/01/20 18:20 | EPA 200.8 | SMP | 1551 | |
| **Selenium** | **6.6** | **0.60** | **4.0** | **ug/L** | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:21 | EPA 200.8 | SMP | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:03 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.76** | **0.30** | **1.0** | **ug/L** | 1 | AC04356 | 03/21/20 00:05 | 03/21/20 00:05 | EPA 218.6 | LRN | 1551 | J |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **1.2** | **0.30** | **1.0** | **ug/L** | 1 | AC04356 | 03/21/20 00:24 | 03/21/20 00:24 | EPA 218.6 | LRN | 1551 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **1.0** | **0.30** | **1.0** | **ug/L** | 1 | AC04356 | 03/21/20 00:44 | 03/21/20 00:44 | EPA 218.6 | LRN | 1551 | |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **1.2** | **0.30** | **1.0** | **ug/L** | 1 | AC04356 | 03/20/20 21:17 | 03/20/20 21:17 | EPA 218.6 | LRN | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **5.3** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **5.2** | **0.60** | **4.0** | **ug/L** | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:42 | EPA 200.8 | SMP | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:09 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **7.7** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **7.1** | **0.60** | **4.0** | **ug/L** | 2 | AC04255 | 03/20/20 09:00 | 04/01/20 13:04 | EPA 200.8 | SMP | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/30/20 23:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:17 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **8.5** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **6.3** | **0.60** | **4.0** | **ug/L** | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:17 | EPA 200.8 | SMP | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:17 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 18:26 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.2** | **4.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **8.8** | **3.0** | **5.0** | **ug/L** | 10 | AC04255 | 03/20/20 09:00 | 04/01/20 17:28 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **6.8** | **0.60** | **4.0** | **ug/L** | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:34 | EPA 200.8 | SMP | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04255 | 03/20/20 09:00 | 03/31/20 00:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04255 | 03/20/20 09:00 | 03/30/20 19:34 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury** | **10.6** | **0.200** | **0.500** | **ng/l** | 1 | AD03177 | 04/02/20 17:00 | 04/03/20 17:10 | EPA 1631E | AJC | 2728 | |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury** | **0.526** | **0.200** | **0.500** | **ng/l** | 1 | AD03177 | 04/02/20 17:00 | 04/03/20 17:18 | EPA 1631E | AJC | 2728 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury** | **3.09** | **2.00** | **5.00** | **ng/l** | 10 | AD03177 | 04/02/20 17:00 | 04/03/20 17:26 | EPA 1631E | AJC | 2728 | R-01, J |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury** | **0.856** | **0.200** | **0.500** | **ng/l** | 1 | AD03177 | 04/02/20 17:00 | 04/03/20 17:34 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury, dissolved** | **0.576** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 16:51 | EPA 1631E | AJC | 2728 | |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury, dissolved** | **0.273** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 16:59 | EPA 1631E | AJC | 2728 | J |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury, dissolved** | **0.952** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 17:07 | EPA 1631E | AJC | 2728 | |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| **Mercury, dissolved** | **0.477** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 17:15 | EPA 1631E | AJC | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:16 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:18 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:19 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:21 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 19:04 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 19:04 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | *78.5 %* | | *39-120* | | | *AC04608* | *03/25/20 07:00* | *04/01/20 19:04* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 21:24 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 21:24 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | *89.3 %* | | *39-120* | | | *AC04608* | *03/25/20 07:00* | *04/01/20 21:24* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 21:58 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 21:58 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | *77.0 %* | | *39-120* | | | *AC04608* | *03/25/20 07:00* | *04/01/20 21:58* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 22:33 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04608 | 03/25/20 07:00 | 04/01/20 22:33 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | *57.3 %* | | *39-120* | | | *AC04608* | *03/25/20 07:00* | *04/01/20 22:33* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 13:10 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *95.1 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 13:10* | *8260GRO* | *JV* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 13:45 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *104 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 13:45* | *8260GRO* | *JV* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 14:20 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *103 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 14:20* | *8260GRO* | *JV* | 1551 | |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 14:55 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.9 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 14:55* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 04:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.8 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 05:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *95.4 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.4 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 05:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 06:13 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *99.8 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| **Trip Blank - Surface Water (20C2474-05) Water Sampled: 03/18/20 00:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 06:47 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *95.3 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 04:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *97.8 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 04:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 05:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *95.4 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.4 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:04* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 05:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 05:39* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 06:13 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *101 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *99.8 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:13* | *EPA 624.1* | *JV* | 1551 | |
| **Trip Blank - Surface Water (20C2474-05) Water Sampled: 03/18/20 00:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04246 | 03/19/20 15:32 | 03/20/20 06:47 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *107 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *95.3 %* | *70-130* | | | *AC04246* | *03/19/20 15:32* | *03/20/20 06:47* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:10 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *113 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:10* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 13:45 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:45* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:45* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *122 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 13:45* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:20 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *112 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *118 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:20* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 14:55 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *119 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *125 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 14:55* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trip Blank - Surface Water (20C2474-05) Water** | **Sampled: 03/18/20 00:00** | **Received: 03/18/20 21:16** | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 15:29 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *124 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 15:29* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *127 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 15:29* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *120 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 15:29* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:12 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *102 %* | *10-147* | | | *AC04607* | *03/25/20 00:00* | *04/04/20 03:12* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 03:49 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *103 %* | *10-147* | | | *AC04607* | *03/25/20 00:00* | *04/04/20 03:49* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 04:24 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *101 %* | *10-147* | | | *AC04607* | *03/25/20 00:00* | *04/04/20 04:24* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDT | ND | 0.0030 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDE | ND | 0.0040 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| 4,4′-DDD | ND | 0.0050 | 0.020 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | 1 | AC04607 | 03/25/20 00:00 | 04/04/20 05:02 | EPA 608.3 | MCB | 1551 | U |
| *Surrogate: Dibutylchlorendate* | | *108 %* | *10-147* | | | *AC04607* | *03/25/20 00:00* | *04/04/20 05:02* | *EPA 608.3* | *MCB* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.5** | **0.90** | **10** | **ug/L** | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/01/20 23:51 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *80.4 %* | *27-119* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *37.9 %* | *7-85* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *77.2 %* | *15-314* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *101 %* | *36-141* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *33.4 %* | *1-65* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *69.6 %* | *4-168* | | | *AC04605* | *03/25/20 08:00* | *04/01/20 23:51* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **1.2** | **0.90** | **10** | **ug/L** | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | QM-15, U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 00:28 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *37.6 %* | *27-119* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *34.2 %* | *7-85* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *36.3 %* | *15-314* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *65.7 %* | *36-141* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *33.3 %* | *1-65* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *71.2 %* | *4-168* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 00:28* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.3** | **0.90** | **10** | **ug/L** | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | **J** |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:04 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *90.0 %* | *27-119* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *50.1 %* | *7-85* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *87.8 %* | *15-314* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *99.2 %* | *36-141* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *41.4 %* | *1-65* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *99.8 %* | *4-168* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:04* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.2** | **0.90** | **10** | **ug/L** | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | **Received: 03/18/20 21:16** | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04605 | 03/25/20 08:00 | 04/02/20 01:41 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *89.4 %* | *27-119* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *57.8 %* | *7-85* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *95.7 %* | *15-314* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *99.6 %* | *36-141* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *38.6 %* | *1-65* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *90.6 %* | *4-168* | | | *AC04605* | *03/25/20 08:00* | *04/02/20 01:41* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water** | **Sampled: 03/18/20 12:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 00:35 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 00:35 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *93.4 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 00:35* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *97.2 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 00:35* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *64.5 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 00:35* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water** | **Sampled: 03/18/20 13:00** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 01:09 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 01:09 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *100 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:09* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *106 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:09* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *67.6 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:09* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water** | **Sampled: 03/18/20 14:30** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 01:43 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 01:43 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *100 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:43* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *105 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:43* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *61.4 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 01:43* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-SW-D (20C2474-04) Water** | **Sampled: 03/18/20 15:45** | | **Received: 03/18/20 21:16** | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 02:17 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 02:17 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *101 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 02:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *106 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 02:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *70.8 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 02:17* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-A (20C2474-01) Water Sampled: 03/18/20 12:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 06:57 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *75.5 %* | *24-119* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *77.1 %* | *15-314* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *88.8 %* | *37-139* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 06:57* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 07:35 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-B (20C2474-02) Water Sampled: 03/18/20 13:00 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *38.2 %* | *24-119* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *40.1 %* | *15-314* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *58.1 %* | *37-139* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 07:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-SW-C (20C2474-03) Water Sampled: 03/18/20 14:30 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:12 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *82.2 %* | *24-119* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:12* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *67.8 %* | *15-314* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:12* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *86.8 %* | *37-139* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:12* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-SW-D (20C2474-04) Water Sampled: 03/18/20 15:45 Received: 03/18/20 21:16** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03146 | 03/25/20 08:00 | 04/03/20 08:50 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *82.6 %* | *24-119* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:50* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *64.6 %* | *15-314* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:50* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *86.3 %* | *37-139* | | | *AD03146* | *03/25/20 08:00* | *04/03/20 08:50* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04293 - General Prep** | | | | | | | | | | | |
| **Blank (AC04293-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04293-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.77 | 0.30 | 1.0 | ug/L | 10.0 | | 97.7 | 90-110 | | | |
| **Duplicate (AC04293-DUP1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 0.435 | 0.30 | 1.0 | ug/L | | 0.406 | | | 6.90 | 20 | J |
| **Matrix Spike (AC04293-MS1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.82 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 94.2 | 90-110 | | | |
| **Matrix Spike (AC04293-MS2)** | | **Source: 20C2038-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04293-MSD1)** | | **Source: 20C1808-01** | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Chromium, hexavalent | 10.0 | 0.30 | 1.0 | ug/L | 10.0 | 0.406 | 96.4 | 90-110 | 2.22 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC04651-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04651-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.6 | 0.050 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Cadmium | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead | 18.4 | 0.060 | 0.25 | ug/L | 20.0 | | 92.0 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Thallium | 18.6 | 0.050 | 0.10 | ug/L | 20.0 | | 93.1 | 85-115 | | | |
| Zinc | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 2.22 | 1.6 | 2.0 | ug/L | | 2.11 | | | 5.08 | 20 | |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 2.40 | 1.6 | 2.0 | ug/L | | 2.45 | | | 2.05 | 20 | |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 3.36 | 1.2 | 2.0 | ug/L | | 3.23 | | | 3.89 | 20 | |
| Selenium | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Silver | ND | 0.050 | 0.10 | ug/L | | 0.0500 | | | 200 | 20 | U |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 41.7 | 16 | 20 | ug/L | | 41.6 | | | 0.327 | 20 | |
| **Matrix Spike (AC04651-MS1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 21.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Arsenic | 23.5 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 107 | 70-130 | | | |
| Beryllium | 22.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 18.7 | 2.0 | 2.0 | ug/L | 20.0 | ND | 93.5 | 70-130 | | | |
| Copper | 24.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | | | |
| Lead | 18.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 91.8 | 70-130 | | | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 95.7 | 70-130 | | | |
| Selenium | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 97.7 | 70-130 | | | |
| Thallium | 18.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Zinc | 143 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | | | |
| **Matrix Spike (AC04651-MS2)** | | **Source: 20C2440-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.1 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 21.5 | 1.6 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Beryllium | 21.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.8 | 70-130 | | | |
| Chromium | 20.2 | 2.0 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper | 23.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.32 | 103 | 70-130 | | | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Nickel | 20.9 | 1.2 | 2.0 | ug/L | 20.0 | 2.15 | 93.6 | 70-130 | | | |
| Selenium | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | 0.663 | 100 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Thallium | 18.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 92.0 | 70-130 | | | |
| Zinc | 107 | 16 | 20 | ug/L | 100 | ND | 107 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04651-MSD1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.56 | 20 | |
| Arsenic | 23.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 105 | 70-130 | 1.37 | 20 | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 110 | 70-130 | 2.14 | 20 | |
| Cadmium | 19.9 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.3 | 70-130 | 3.21 | 20 | |
| Chromium | 19.4 | 2.0 | 2.0 | ug/L | 20.0 | ND | 96.8 | 70-130 | 3.53 | 20 | |
| Copper | 24.1 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | 0.166 | 20 | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | 1.19 | 20 | |
| Nickel | 22.5 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 96.4 | 70-130 | 0.607 | 20 | |
| Selenium | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 100 | 70-130 | 0.781 | 20 | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 95.5 | 70-130 | 2.20 | 20 | |
| Thallium | 18.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 91.7 | 70-130 | 2.12 | 20 | |
| Zinc | 142 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | 0.651 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04356 - General Prep** | | | | | | | | | | | |
| **Blank (AC04356-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04356-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | | 98.0 | 90-110 | | | |
| **Duplicate (AC04356-DUP1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04356-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.9 | 90-110 | | | |
| **Matrix Spike (AC04356-MS2)** | | **Source: 20C2474-04** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.9 | 0.30 | 1.0 | ug/L | 10.0 | 1.20 | 97.3 | 90-110 | | | |
| **Matrix Spike Dup (AC04356-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 1.83 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04255-BLK1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | 0.474 | 0.40 | 0.50 | ug/L | | | | | | | J |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0706 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04255-BS1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.0 | 0.20 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Arsenic, dissolved | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Beryllium, dissolved | 20.9 | 0.050 | 0.10 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Cadmium, dissolved | 20.4 | 0.060 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Chromium, dissolved | 21.3 | 0.50 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Copper, dissolved | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 85-115 | | | |
| Lead, dissolved | 20.6 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Selenium, dissolved | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Silver, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium, dissolved | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Zinc, dissolved | 98.2 | 4.0 | 5.0 | ug/L | 100 | | 98.2 | 85-115 | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel, dissolved | 4.09 | 3.0 | 5.0 | ug/L | | 4.04 | | | 1.09 | 20 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04255-DUP1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/31/20 | | | | | | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **MRL Check (AC04255-MRL1)** | | | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 0.864 | 0.20 | 0.50 | ug/L | 0.800 | | 108 | 0-200 | | | |
| Arsenic, dissolved | 0.737 | 0.40 | 0.50 | ug/L | 0.800 | | 92.1 | 0-200 | | | |
| Beryllium, dissolved | 0.170 | 0.050 | 0.10 | ug/L | 0.160 | | 106 | 0-200 | | | |
| Cadmium, dissolved | 0.159 | 0.060 | 0.10 | ug/L | 0.160 | | 99.1 | 0-200 | | | |
| Chromium, dissolved | 1.02 | 0.50 | 0.50 | ug/L | 0.800 | | 128 | 0-200 | | | |
| Copper, dissolved | 1.19 | 0.40 | 0.50 | ug/L | 0.800 | | 148 | 0-200 | | | |
| Lead, dissolved | 0.418 | 0.060 | 0.25 | ug/L | 0.400 | | 104 | 0-200 | | | |
| Nickel, dissolved | 0.835 | 0.30 | 0.50 | ug/L | 0.800 | | 104 | 0-200 | | | |
| Selenium, dissolved | 0.754 | 0.30 | 2.0 | ug/L | 0.800 | | 94.3 | 0-200 | | | J |
| Silver, dissolved | 0.188 | 0.050 | 0.10 | ug/L | 0.160 | | 117 | 0-200 | | | |
| Thallium, dissolved | 0.162 | 0.050 | 0.10 | ug/L | 0.160 | | 101 | 0-200 | | | |
| Zinc, dissolved | 7.69 | 4.0 | 5.0 | ug/L | 8.00 | | 96.1 | 0-200 | | | |
| **Matrix Spike (AC04255-MS1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.1 | 2.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Arsenic, dissolved | 22.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 114 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 23.3 | 0.12 | 0.20 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Chromium, dissolved | 20.3 | 5.0 | 5.0 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 19.8 | 0.60 | 2.5 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Nickel, dissolved | 24.3 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 101 | 70-130 | | | |
| Selenium, dissolved | 22.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Silver, dissolved | 22.5 | 0.10 | 0.20 | ug/L | 20.0 | ND | 113 | 70-130 | | | |
| Thallium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.1 | 70-130 | | | |
| Zinc, dissolved | 99.3 | 40 | 50 | ug/L | 100 | ND | 99.3 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04255 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Matrix Spike (AC04255-MS2)** | | **Source: 20C2261-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 20.7 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 23.1 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Beryllium, dissolved | 20.6 | 0.50 | 1.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Cadmium, dissolved | 18.7 | 0.12 | 0.20 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Chromium, dissolved | 16.2 | 5.0 | 5.0 | ug/L | 20.0 | ND | 80.9 | 70-130 | | | |
| Copper, dissolved | 20.8 | 4.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Lead, dissolved | 19.6 | 0.60 | 2.5 | ug/L | 20.0 | ND | 97.9 | 70-130 | | | |
| Nickel, dissolved | 29.9 | 3.0 | 5.0 | ug/L | 20.0 | 10.3 | 97.9 | 70-130 | | | |
| Selenium, dissolved | 19.1 | 0.60 | 4.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.6 | 70-130 | | | |
| Thallium, dissolved | 19.5 | 0.50 | 1.0 | ug/L | 20.0 | ND | 97.3 | 70-130 | | | |
| Zinc, dissolved | 99.1 | 40 | 50 | ug/L | 100 | ND | 99.1 | 70-130 | | | |
| **Matrix Spike Dup (AC04255-MSD1)** | | **Source: 20C2038-01** | | | Prepared: 03/20/20 Analyzed: 03/30/20 | | | | | | |
| Antimony, dissolved | 21.3 | 2.0 | 5.0 | ug/L | 20.0 | ND | 106 | 70-130 | 0.798 | 20 | |
| Arsenic, dissolved | 23.2 | 4.0 | 5.0 | ug/L | 20.0 | ND | 116 | 70-130 | 2.03 | 20 | |
| Beryllium, dissolved | 21.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 105 | 70-130 | 2.14 | 20 | |
| Cadmium, dissolved | 19.2 | 0.12 | 0.20 | ug/L | 20.0 | ND | 96.2 | 70-130 | 18.9 | 20 | |
| Chromium, dissolved | 22.0 | 5.0 | 5.0 | ug/L | 20.0 | ND | 110 | 70-130 | 7.84 | 20 | |
| Copper, dissolved | 20.6 | 4.0 | 5.0 | ug/L | 20.0 | ND | 103 | 70-130 | 3.17 | 20 | |
| Lead, dissolved | 20.1 | 0.60 | 2.5 | ug/L | 20.0 | ND | 101 | 70-130 | 1.66 | 20 | |
| Nickel, dissolved | 24.5 | 3.0 | 5.0 | ug/L | 20.0 | 4.04 | 102 | 70-130 | 0.565 | 20 | |
| Selenium, dissolved | 19.7 | 0.60 | 4.0 | ug/L | 20.0 | ND | 98.6 | 70-130 | 12.5 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 93.1 | 70-130 | 18.8 | 20 | |
| Thallium, dissolved | 20.4 | 0.50 | 1.0 | ug/L | 20.0 | ND | 102 | 70-130 | 2.99 | 20 | |
| Zinc, dissolved | 97.8 | 40 | 50 | ug/L | 100 | ND | 97.8 | 70-130 | 1.56 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03177 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03177-BLK1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03177-BS1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 4.63 | 0.200 | 0.500 | ng/l | 5.00 | | 92.6 | 77-123 | | | |
| **Matrix Spike (AD03177-MS1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 24.5 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 92.4 | 71-125 | | | |
| **Matrix Spike (AD03177-MS2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 91.7 | 71-125 | | | |
| **Matrix Spike Dup (AD03177-MSD1)** | | **Source: 20C1280-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.1 | 0.200 | 0.500 | ng/l | 25.0 | 1.40 | 86.7 | 71-125 | 5.97 | 24 | |
| **Matrix Spike Dup (AD03177-MSD2)** | | **Source: 20C2445-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 23.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.314 | 90.9 | 71-125 | 0.907 | 24 | |
| **Reference (AD03177-SRM1)** | | | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Mercury | 46.1 | 0.200 | 0.500 | ng/l | 50.0 | | 92.2 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Reference (AD03694-SRM1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 46.7 | 0.200 | 0.500 | ng/l | 50.0 | | 93.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03027 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03027-BLK1)** | | | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03027-BS1)** | | | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.185 | 0.0020 | 0.0030 | mg/L | 0.200 | | 92.7 | 85-115 | | | |
| **Duplicate (AD03027-DUP1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03027-MS1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.210 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 105 | 85-115 | | | |
| **Matrix Spike (AD03027-MS2)** | | **Source: 20C2583-07** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.218 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 109 | 85-115 | | | |
| **Matrix Spike Dup (AD03027-MSD1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.210 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 105 | 85-115 | 0.257 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04608 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04608-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *52.2* | | | *ug/L* | *57.4* | | *90.9* | *39-120* | | | |
| **LCS (AC04608-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1650 | 50 | 250 | ug/L | 2100 | | 78.7 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *50.3* | | | *ug/L* | *57.4* | | *87.7* | *39-120* | | | |
| **LCS (AC04608-BS2)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Motor Oil | 1490 | 100 | 250 | ug/L | 2010 | | 74.3 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *41.7* | | | *ug/L* | *57.4* | | *72.6* | *39-120* | | | |
| **LCS Dup (AC04608-BSD1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Diesel | 1630 | 50 | 250 | ug/L | 2100 | | 77.6 | 61-120 | 1.40 | 25 | |
| *Surrogate: Tetratetracontane* | *37.6* | | | *ug/L* | *57.4* | | *65.5* | *39-120* | | | |
| **LCS Dup (AC04608-BSD2)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Motor Oil | 1470 | 100 | 250 | ug/L | 2010 | | 73.0 | 71-125 | 1.69 | 25 | |
| *Surrogate: Tetratetracontane* | *65.5* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05006 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05006-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *76-129* | | | |
| **LCS (AC05006-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 152 | 50 | 50 | ug/L | 200 | | 75.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **LCS Dup (AC05006-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 173 | 50 | 50 | ug/L | 200 | | 86.5 | 67-132 | 13.2 | 25 | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *76-129* | | | |
| **Matrix Spike (AC05006-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 174 | 50 | 50 | ug/L | 200 | ND | 87.2 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC05006-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 159 | 50 | 50 | ug/L | 200 | ND | 79.5 | 37-156 | 9.24 | 25 | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *97.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 64.2 | 2.0 | 5.0 | ug/L | 50.0 | | 128 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| Acrolein | 68.3 | 2.0 | 5.0 | ug/L | 50.0 | | 137 | 60-140 | 6.22 | 25 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 53.5 | 2.0 | 5.0 | ug/L | 50.0 | ND | 107 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| Acrolein | 63.3 | 2.0 | 5.0 | ug/L | 50.0 | ND | 127 | 40-160 | 16.8 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04246 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04246-BLK1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04246-BS1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.5 | 0.70 | 1.0 | ug/L | 25.0 | | 110 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| **LCS Dup (AC04246-BSD1)** | | | | | Prepared & Analyzed: 03/19/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.7 | 3-225 | 11.7 | 30 | |
| *Surrogate: Bromofluorobenzene* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |
| **Matrix Spike (AC04246-MS1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 29.8 | 0.70 | 1.0 | ug/L | 25.0 | ND | 119 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.4* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.5* | | | *ug/L* | *25.0* | | *98.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (AC04246-MSD1)** | | **Source: 20C2261-01** | | | Prepared: 03/19/20 Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 110 | 3-305 | 8.39 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.7* | | | *ug/L* | *25.0* | | *98.7* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05007-BLK1)** | | | | Prepared & Analyzed: 03/30/20 | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05007-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.9 | 0.30 | 0.30 | ug/L | 20.0 | | 99.6 | 65-135 | | | |
| Bromoform | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Carbon tetrachloride | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | | | |
| Chlorobenzene | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.0 | 65-135 | | | |
| Dibromochloromethane | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-135 | | | |
| Chloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.6 | 40-160 | | | |
| Chloroform | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-135 | | | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | | | |
| 1,1-Dichloroethene | 18.0 | 0.30 | 0.50 | ug/L | 20.0 | | 90.1 | 50-150 | | | |
| 1,2-Dichloropropane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | | 90.2 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.0 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 50-150 | | | |
| Ethylbenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 60-140 | | | |
| Bromomethane | 16.4 | 0.40 | 0.50 | ug/L | 20.0 | | 81.8 | 15-185 | | | |
| Chloromethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 2-205 | | | |
| Methylene chloride | 19.2 | 0.50 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.5 | 0.30 | 0.50 | ug/L | 20.0 | | 97.3 | 60-140 | | | |
| Tetrachloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| Toluene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | | | |
| Trichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.7 | 65-135 | | | |
| Vinyl chloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 65-135 | | | |
| 1,3-Dichlorobenzene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.5 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC05007-BSD1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 120 | 60-140 | 0.672 | 25 | |
| Benzene | 20.9 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 65-135 | 4.66 | 25 | |
| Bromoform | 22.9 | 0.30 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | 6.62 | 25 | |
| Carbon tetrachloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 4.66 | 25 | |
| Chlorobenzene | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 3.26 | 25 | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | | 121 | 70-135 | 7.17 | 25 | |
| Chloroethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.6 | 40-160 | 2.37 | 25 | |
| Chloroform | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-135 | 4.04 | 25 | |
| Bromodichloromethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | 3.81 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.88 | 25 | |
| 1,2-Dichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.10 | 25 | |
| 1,1-Dichloroethene | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | | 96.7 | 50-150 | 7.07 | 25 | |
| 1,2-Dichloropropane | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 35-165 | 2.90 | 25 | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.8 | 25-175 | 4.17 | 25 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 50-150 | 6.56 | 25 | |
| Ethylbenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 5.44 | 25 | |
| Bromomethane | 18.2 | 0.40 | 0.50 | ug/L | 20.0 | | 91.2 | 15-185 | 10.8 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 2-205 | 4.98 | 25 | |
| Methylene chloride | 19.7 | 0.50 | 0.50 | ug/L | 20.0 | | 98.5 | 60-140 | 2.62 | 25 | |
| 1,1,2,2-Tetrachloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.57 | 25 | |
| Tetrachloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.68 | 25 | |
| Toluene | 21.6 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 70-130 | 5.52 | 25 | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | 3.41 | 25 | |
| 1,1,1-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 8.60 | 25 | |
| 1,1,2-Trichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 4.00 | 25 | |
| Trichloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 4.55 | 25 | |
| Vinyl chloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.6 | 5-195 | 3.16 | 25 | |
| 1,2-Dichlorobenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 65-135 | 3.81 | 25 | |
| 1,3-Dichlorobenzene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 4.04 | 25 | |
| 1,4-Dichlorobenzene | 20.1 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 0.150 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05007-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | | | |
| Benzene | 22.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 111 | 37-151 | | | |
| Bromoform | 21.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 45-169 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 70-140 | | | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 53-149 | | | |
| Chloroethane | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.6 | 14-230 | | | |
| Chloroform | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 51-138 | | | |
| Bromodichloromethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 35-155 | | | |
| 1,1-Dichloroethane | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 59-155 | | | |
| 1,2-Dichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 49-155 | | | |
| 1,1-Dichloroethene | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.7 | 2-210 | | | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 91.8 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.2 | 17-183 | | | |
| Ethylbenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 37-162 | | | |
| Bromomethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 2-242 | | | |
| Chloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 2-273 | | | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.2 | 46-157 | | | |
| Tetrachloroethene | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | | | |
| Toluene | 22.6 | 0.30 | 0.30 | ug/L | 20.0 | ND | 113 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 52-150 | | | |
| Trichloroethene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 70-157 | | | |
| Vinyl chloride | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 2-251 | | | |
| 1,2-Dichlorobenzene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.0 | 0.10 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05007-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 113 | 40-160 | 3.77 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 0.898 | 61 | |
| Bromoform | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 45-169 | 7.64 | 42 | |
| Carbon tetrachloride | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | 5.44 | 41 | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0488 | 53 | |
| Dibromochloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 53-149 | 2.77 | 50 | |
| Chloroethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 14-230 | 4.35 | 78 | |
| Chloroform | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 51-138 | 1.10 | 54 | |
| Bromodichloromethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 35-155 | 4.65 | 56 | |
| 1,1-Dichloroethane | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | 1.94 | 40 | |
| 1,2-Dichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 49-155 | 2.11 | 49 | |
| 1,1-Dichloroethene | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 2-234 | 1.37 | 32 | |
| 1,2-Dichloropropane | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.4 | 2-210 | 3.87 | 55 | |
| cis-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.0 | 2-227 | 5.56 | 58 | |
| trans-1,3-Dichloropropene | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 17-183 | 3.44 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 4.37 | 63 | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-242 | 7.58 | 61 | |
| Chloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 2-273 | 0.502 | 60 | |
| Methylene chloride | 20.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 103 | 2-221 | 3.01 | 28 | |
| 1,1,2,2-Tetrachloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 46-157 | 2.05 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 0.446 | 39 | |
| Toluene | 23.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 1.97 | 41 | |
| trans-1,2-Dichloroethene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | 0.655 | 45 | |
| 1,1,1-Trichloroethane | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 52-162 | 1.41 | 36 | |
| 1,1,2-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-150 | 0.599 | 45 | |
| Trichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 70-157 | 1.94 | 48 | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | 6.33 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 1.88 | 57 | |
| 1,3-Dichlorobenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 59-156 | 3.18 | 43 | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | 2.22 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04607 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04607-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Aldrin | ND | 0.0020 | 0.0050 | ug/L | | | | | | | U |
| alpha-BHC | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| beta-BHC | ND | 0.0040 | 0.0050 | ug/L | | | | | | | U |
| gamma-BHC (Lindane) | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| delta-BHC | ND | 0.0020 | 0.0050 | ug/L | | | | | | | U |
| Chlordane (tech) | ND | 0.010 | 0.050 | ug/L | | | | | | | U |
| 4,4´-DDT | ND | 0.0030 | 0.010 | ug/L | | | | | | | U |
| 4,4´-DDE | ND | 0.0040 | 0.020 | ug/L | | | | | | | U |
| 4,4´-DDD | ND | 0.0050 | 0.020 | ug/L | | | | | | | U |
| Dieldrin | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Endosulfan I | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| Endosulfan II | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Endosulfan sulfate | ND | 0.0030 | 0.050 | ug/L | | | | | | | U |
| Endrin | ND | 0.0080 | 0.010 | ug/L | | | | | | | U |
| Endrin aldehyde | ND | 0.0040 | 0.010 | ug/L | | | | | | | U |
| Heptachlor | ND | 0.0050 | 0.010 | ug/L | | | | | | | U |
| Heptachlor epoxide | ND | 0.0090 | 0.010 | ug/L | | | | | | | U |
| PCB-1016 | ND | 0.080 | 0.50 | ug/L | | | | | | | U |
| PCB-1221 | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| PCB-1232 | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| PCB-1242 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| PCB-1248 | ND | 0.060 | 0.50 | ug/L | | | | | | | U |
| PCB-1254 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| PCB-1260 | ND | 0.040 | 0.50 | ug/L | | | | | | | U |
| Toxaphene | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Dibutylchlorendate* | *0.498* | | | *ug/L* | *0.498* | | *100* | *10-147* | | | |
| **LCS (AC04607-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/04/20 | | | | | | |
| Aldrin | 0.211 | 0.0020 | 0.0050 | ug/L | 0.240 | | 88.0 | 42-140 | | | |
| alpha-BHC | 0.213 | 0.0040 | 0.010 | ug/L | 0.240 | | 88.7 | 37-140 | | | |
| beta-BHC | 0.233 | 0.0040 | 0.0050 | ug/L | 0.240 | | 97.2 | 17-147 | | | |
| gamma-BHC (Lindane) | 0.230 | 0.0040 | 0.010 | ug/L | 0.240 | | 95.9 | 32-140 | | | |
| delta-BHC | 0.245 | 0.0020 | 0.0050 | ug/L | 0.240 | | 102 | 19-140 | | | |
| 4,4´-DDT | 0.236 | 0.0030 | 0.010 | ug/L | 0.240 | | 98.3 | 31-141 | | | |
| 4,4´-DDE | 0.234 | 0.0040 | 0.020 | ug/L | 0.240 | | 97.5 | 30-145 | | | |
| 4,4´-DDD | 0.222 | 0.0050 | 0.020 | ug/L | 0.240 | | 92.6 | 25-160 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04607 - SVOAs in Water GC** | | | | | | | | | | | |
| **LCS (AC04607-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/04/20 | | | | | | |
| Dieldrin | 0.239 | 0.0050 | 0.010 | ug/L | 0.240 | | 99.7 | 36-146 | | | |
| Endosulfan I | 0.227 | 0.0040 | 0.010 | ug/L | 0.240 | | 94.4 | 45-153 | | | |
| Endosulfan II | 0.266 | 0.0050 | 0.010 | ug/L | 0.240 | | 111 | 0-202 | | | |
| Endosulfan sulfate | 0.247 | 0.0030 | 0.050 | ug/L | 0.240 | | 103 | 26-144 | | | |
| Endrin | 0.254 | 0.0080 | 0.010 | ug/L | 0.240 | | 106 | 30-147 | | | |
| Endrin aldehyde | 0.237 | 0.0040 | 0.010 | ug/L | 0.240 | | 98.8 | 45-140 | | | |
| Heptachlor | 0.219 | 0.0050 | 0.010 | ug/L | 0.240 | | 91.1 | 34-140 | | | |
| Heptachlor epoxide | 0.233 | 0.0090 | 0.010 | ug/L | 0.240 | | 97.2 | 37-142 | | | |
| *Surrogate: Dibutylchlorendate* | *0.494* | | | *ug/L* | *0.498* | | *99.1* | *10-147* | | | |
| **LCS (AC04607-BS2)** | | | | | Prepared: 03/25/20 Analyzed: 04/04/20 | | | | | | |
| Toxaphene | 9.98 | 0.20 | 0.50 | ug/L | 9.60 | | 104 | 41-140 | | | |
| **Matrix Spike (AC04607-MS1)** | | **Source: 20C2474-03** | | | Prepared: 03/25/20 Analyzed: 04/04/20 | | | | | | |
| Aldrin | 0.261 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 109 | 42-140 | | | |
| alpha-BHC | 0.268 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 112 | 37-140 | | | |
| beta-BHC | 0.282 | 0.0040 | 0.0050 | ug/L | 0.240 | ND | 117 | 17-147 | | | |
| gamma-BHC (Lindane) | 0.279 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 116 | 32-140 | | | |
| delta-BHC | 0.305 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 127 | 19-140 | | | |
| 4,4′-DDT | 0.250 | 0.0030 | 0.010 | ug/L | 0.240 | ND | 104 | 25-160 | | | |
| 4,4′-DDE | 0.284 | 0.0040 | 0.020 | ug/L | 0.240 | ND | 118 | 30-145 | | | |
| 4,4′-DDD | 0.288 | 0.0050 | 0.020 | ug/L | 0.240 | ND | 120 | 31-141 | | | |
| Dieldrin | 0.286 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 119 | 36-146 | | | |
| Endosulfan I | 0.280 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 117 | 45-153 | | | |
| Endosulfan II | 0.296 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 123 | 2-202 | | | |
| Endosulfan sulfate | 0.302 | 0.0030 | 0.050 | ug/L | 0.240 | ND | 126 | 26-144 | | | |
| Endrin | 0.298 | 0.0080 | 0.010 | ug/L | 0.240 | ND | 124 | 30-147 | | | |
| Endrin aldehyde | 0.287 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 120 | 45-140 | | | |
| Heptachlor | 0.256 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 107 | 34-140 | | | |
| Heptachlor epoxide | 0.282 | 0.0090 | 0.010 | ug/L | 0.240 | ND | 118 | 37-142 | | | |
| *Surrogate: Dibutylchlorendate* | *0.584* | | | *ug/L* | *0.498* | | *117* | *10-147* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Organochlorine Pesticides and PCBs by EPA Method 608.3 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04607 - SVOAs in Water GC** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04607-MSD1)** | | **Source: 20C2474-03** | | | Prepared: 03/25/20 Analyzed: 04/04/20 | | | | | | |
| Aldrin | 0.234 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 97.5 | 42-140 | 10.8 | 35 | |
| alpha-BHC | 0.251 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 105 | 37-140 | 6.30 | 36 | |
| beta-BHC | 0.265 | 0.0040 | 0.0050 | ug/L | 0.240 | ND | 110 | 17-147 | 6.04 | 44 | |
| gamma-BHC (Lindane) | 0.260 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 108 | 32-140 | 6.95 | 39 | |
| delta-BHC | 0.272 | 0.0020 | 0.0050 | ug/L | 0.240 | ND | 113 | 19-140 | 11.6 | 52 | |
| 4,4′-DDT | 0.249 | 0.0030 | 0.010 | ug/L | 0.240 | ND | 104 | 25-160 | 0.291 | 42 | |
| 4,4′-DDE | 0.264 | 0.0040 | 0.020 | ug/L | 0.240 | ND | 110 | 30-145 | 7.05 | 35 | |
| 4,4′-DDD | 0.262 | 0.0050 | 0.020 | ug/L | 0.240 | ND | 109 | 31-141 | 9.39 | 39 | |
| Dieldrin | 0.266 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 111 | 36-146 | 7.07 | 49 | |
| Endosulfan I | 0.261 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 109 | 45-153 | 6.92 | 28 | |
| Endosulfan II | 0.298 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 124 | 2-202 | 0.588 | 53 | |
| Endosulfan sulfate | 0.290 | 0.0030 | 0.050 | ug/L | 0.240 | ND | 121 | 26-144 | 4.00 | 38 | |
| Endrin | 0.285 | 0.0080 | 0.010 | ug/L | 0.240 | ND | 119 | 30-147 | 4.66 | 48 | |
| Endrin aldehyde | 0.269 | 0.0040 | 0.010 | ug/L | 0.240 | ND | 112 | 45-140 | 6.56 | 35 | |
| Heptachlor | 0.236 | 0.0050 | 0.010 | ug/L | 0.240 | ND | 98.2 | 34-140 | 8.37 | 43 | |
| Heptachlor epoxide | 0.263 | 0.0090 | 0.010 | ug/L | 0.240 | ND | 110 | 37-142 | 7.04 | 36 | |
| *Surrogate: Dibutylchlorendate* | *0.544* | | | *ug/L* | *0.498* | | *109* | *10-147* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04605-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04605-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *32.2* | | | *ug/L* | *40.0* | | *80.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *21.4* | | | *ug/L* | *40.0* | | *53.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.0* | | | *ug/L* | *40.0* | | *82.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *45.2* | | | *ug/L* | *40.0* | | *113* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.5* | | | *ug/L* | *40.0* | | *41.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *36.7* | | | *ug/L* | *40.0* | | *91.8* | *4-168* | | | |
| **LCS (AC04605-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| 2-Chlorophenol | 30.5 | 0.70 | 5.0 | ug/L | 40.0 | | 76.2 | 36-120 | | | |
| 2,4-Dichlorophenol | 31.8 | 0.70 | 5.0 | ug/L | 40.0 | | 79.5 | 53-122 | | | |
| 2,4-Dimethylphenol | 29.8 | 1.0 | 2.0 | ug/L | 50.0 | | 59.6 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 26.4 | 3.0 | 5.0 | ug/L | 40.0 | | 66.0 | 53-130 | | | |
| 2,4-Dinitrophenol | 5.60 | 5.0 | 5.0 | ug/L | 50.0 | | 11.2 | 10-173 | | | |
| 2-Nitrophenol | 33.6 | 0.90 | 10 | ug/L | 40.0 | | 83.9 | 45-167 | | | |
| 4-Nitrophenol | 20.6 | 3.0 | 10 | ug/L | 40.0 | | 51.4 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 34.6 | 1.0 | 1.0 | ug/L | 40.0 | | 86.4 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 31.4 | 0.60 | 5.0 | ug/L | 40.0 | | 78.4 | 36-102 | | | |
| Pentachlorophenol | 22.4 | 4.0 | 5.0 | ug/L | 40.0 | | 56.1 | 38-152 | | | |
| Phenol | 16.4 | 0.50 | 1.0 | ug/L | 40.0 | | 40.9 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 28.4 | 0.70 | 10 | ug/L | 40.0 | | 71.0 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 36.1 | 0.90 | 5.0 | ug/L | 40.0 | | 90.4 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 34.0 | 0.90 | 1.0 | ug/L | 40.0 | | 85.1 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 31.9 | 1.0 | 2.0 | ug/L | 40.0 | | 79.8 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 28.6 | 3.0 | 5.0 | ug/L | 40.0 | | 71.4 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 37.0 | 1.0 | 5.0 | ug/L | 40.0 | | 92.4 | 65-120 | | | |
| Butyl benzyl phthalate | 25.1 | 0.60 | 10 | ug/L | 40.0 | | 62.7 | 2-140 | | | |
| 2-Chloronaphthalene | 35.9 | 0.60 | 10 | ug/L | 40.0 | | 89.6 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 33.3 | 0.90 | 5.0 | ug/L | 40.0 | | 83.2 | 38-145 | | | |
| 1,2-Dichlorobenzene | 27.6 | 0.60 | 2.0 | ug/L | 40.0 | | 69.1 | 33-93 | | | |
| 1,3-Dichlorobenzene | 27.3 | 0.60 | 1.0 | ug/L | 40.0 | | 68.3 | 31-92 | | | |
| 1,4-Dichlorobenzene | 26.2 | 0.60 | 1.0 | ug/L | 40.0 | | 65.5 | 32-91 | | | |
| Diethyl phthalate | 25.7 | 0.30 | 2.0 | ug/L | 40.0 | | 64.2 | 2-120 | | | |
| Dimethyl phthalate | 19.2 | 0.80 | 2.0 | ug/L | 40.0 | | 47.9 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04605-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| Di-n-butyl phthalate | 34.0 | 0.90 | 10 | ug/L | 40.0 | | 84.9 | 8-120 | | | |
| 2,4-Dinitrotoluene | 33.5 | 0.80 | 5.0 | ug/L | 40.0 | | 83.8 | 48-127 | | | |
| 2,6-Dinitrotoluene | 34.9 | 0.80 | 5.0 | ug/L | 40.0 | | 87.2 | 68-137 | | | |
| Di-n-octyl phthalate | 25.5 | 0.60 | 10 | ug/L | 40.0 | | 63.8 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 37.4 | 0.60 | 1.0 | ug/L | 40.0 | | 93.5 | 52-115 | | | |
| Hexachlorobenzene | 32.1 | 0.90 | 1.0 | ug/L | 40.0 | | 80.2 | 8-142 | | | |
| Hexachlorobutadiene | 27.2 | 0.80 | 1.0 | ug/L | 40.0 | | 67.9 | 38-120 | | | |
| Hexachlorocyclopentadiene | 19.0 | 4.0 | 5.0 | ug/L | 40.0 | | 47.4 | 16-93 | | | |
| Hexachloroethane | 26.8 | 0.60 | 1.0 | ug/L | 40.0 | | 66.9 | 55-120 | | | |
| Isophorone | 36.5 | 0.30 | 1.0 | ug/L | 40.0 | | 91.2 | 47-180 | | | |
| Nitrobenzene | 33.5 | 0.90 | 1.0 | ug/L | 40.0 | | 83.7 | 54-158 | | | |
| N-Nitrosodimethylamine | 24.1 | 0.30 | 5.0 | ug/L | 40.0 | | 60.2 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 34.2 | 0.80 | 5.0 | ug/L | 40.0 | | 85.4 | 14-198 | | | |
| N-Nitrosodiphenylamine | 36.8 | 1.0 | 1.0 | ug/L | 40.0 | | 92.0 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 29.7 | 0.60 | 5.0 | ug/L | 40.0 | | 74.2 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *41.0* | | | *ug/L* | *40.0* | | *103* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *20.8* | | | *ug/L* | *40.0* | | *52.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.6* | | | *ug/L* | *40.0* | | *101* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *31.1* | | | *ug/L* | *40.0* | | *77.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.2* | | | *ug/L* | *40.0* | | *40.6* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *29.8* | | | *ug/L* | *40.0* | | *74.4* | *4-168* | | | |
| **Matrix Spike (AC04605-MS1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| 2-Chlorophenol | 28.3 | 0.70 | 5.0 | ug/L | 40.0 | ND | 70.7 | 23-134 | | | |
| 2,4-Dichlorophenol | 28.5 | 0.70 | 5.0 | ug/L | 40.0 | ND | 71.3 | 39-135 | | | |
| 2,4-Dimethylphenol | 27.7 | 1.0 | 2.0 | ug/L | 50.0 | ND | 55.3 | 32-120 | | | |
| 4,6-Dinitro-2-methylphenol | 13.2 | 3.0 | 5.0 | ug/L | 40.0 | ND | 33.1 | 7-181 | | | |
| 2,4-Dinitrophenol | 9.12 | 5.0 | 5.0 | ug/L | 50.0 | ND | 18.2 | 10-191 | | | |
| 2-Nitrophenol | 28.2 | 0.90 | 10 | ug/L | 40.0 | ND | 70.6 | 29-182 | | | |
| 4-Nitrophenol | 6.20 | 3.0 | 10 | ug/L | 40.0 | ND | 15.5 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 34.2 | 1.0 | 1.0 | ug/L | 40.0 | ND | 85.6 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 30.4 | 0.60 | 5.0 | ug/L | 40.0 | ND | 76.0 | 9-124 | | | |
| Pentachlorophenol | 10.4 | 4.0 | 5.0 | ug/L | 40.0 | ND | 26.1 | 14-176 | | | |
| Phenol | 15.9 | 0.50 | 1.0 | ug/L | 40.0 | ND | 39.8 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 23.7 | 0.70 | 10 | ug/L | 40.0 | ND | 59.2 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 28.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 72.2 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 27.3 | 0.90 | 1.0 | ug/L | 40.0 | ND | 68.3 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04605-MS1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 26.8 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.1 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 23.7 | 3.0 | 5.0 | ug/L | 40.0 | ND | 59.3 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 32.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 80.3 | 53-127 | | | |
| Butyl benzyl phthalate | 22.6 | 0.60 | 10 | ug/L | 40.0 | ND | 56.4 | 2-152 | | | |
| 2-Chloronaphthalene | 26.1 | 0.60 | 10 | ug/L | 40.0 | ND | 65.2 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 27.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 69.3 | 25-158 | | | |
| 1,3-Dichlorobenzene | 21.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 52.7 | 1-106 | | | |
| 1,2-Dichlorobenzene | 22.2 | 0.60 | 2.0 | ug/L | 40.0 | ND | 55.4 | 7-104 | | | |
| 1,4-Dichlorobenzene | 20.7 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.8 | 3-105 | | | |
| Diethyl phthalate | 22.2 | 0.30 | 2.0 | ug/L | 40.0 | ND | 55.4 | 2-120 | | | |
| Dimethyl phthalate | 18.6 | 0.80 | 2.0 | ug/L | 40.0 | ND | 46.5 | 2-120 | | | |
| Di-n-butyl phthalate | 26.8 | 0.90 | 10 | ug/L | 40.0 | 1.19 | 64.0 | 1-120 | | | |
| 2,4-Dinitrotoluene | 27.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 67.5 | 39-139 | | | |
| 2,6-Dinitrotoluene | 28.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 71.0 | 50-158 | | | |
| Di-n-octyl phthalate | 19.6 | 0.60 | 10 | ug/L | 40.0 | ND | 48.9 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 32.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 80.0 | 39-116 | | | |
| Hexachlorobenzene | 27.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 69.8 | 2-152 | | | |
| Hexachlorobutadiene | 21.9 | 0.80 | 1.0 | ug/L | 40.0 | ND | 54.7 | 24-120 | | | |
| Hexachlorocyclopentadiene | 12.7 | 4.0 | 5.0 | ug/L | 40.0 | ND | 31.7 | 10-93 | | | |
| Hexachloroethane | 20.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.0 | 40-120 | | | |
| Isophorone | 28.8 | 0.30 | 1.0 | ug/L | 40.0 | ND | 72.0 | 21-196 | | | |
| Nitrobenzene | 25.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 64.3 | 35-180 | | | |
| N-Nitrosodimethylamine | 19.3 | 0.30 | 5.0 | ug/L | 40.0 | ND | 48.2 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 30.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 77.2 | 2-230 | | | |
| N-Nitrosodiphenylamine | 32.7 | 1.0 | 1.0 | ug/L | 40.0 | ND | 81.8 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 23.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 57.5 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *30.7* | | | *ug/L* | *40.0* | | *76.8* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *19.2* | | | *ug/L* | *40.0* | | *48.1* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.9* | | | *ug/L* | *40.0* | | *74.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *24.9* | | | *ug/L* | *40.0* | | *62.2* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.1* | | | *ug/L* | *40.0* | | *40.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *30.2* | | | *ug/L* | *40.0* | | *75.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04605-MSD1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| 2-Chlorophenol | 16.1 | 0.70 | 5.0 | ug/L | 40.0 | ND | 40.2 | 23-134 | 55.1 | 61 | |
| 2,4-Dichlorophenol | 20.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 51.6 | 39-135 | 32.1 | 50 | |
| 2,4-Dimethylphenol | 33.4 | 1.0 | 2.0 | ug/L | 50.0 | ND | 66.9 | 32-120 | 18.9 | 58 | |
| 4,6-Dinitro-2-methylphenol | 16.5 | 3.0 | 5.0 | ug/L | 40.0 | ND | 41.2 | 7-181 | 21.8 | 203 | |
| 2,4-Dinitrophenol | 34.5 | 5.0 | 5.0 | ug/L | 50.0 | ND | 69.0 | 10-191 | 116 | 132 | |
| 2-Nitrophenol | 16.2 | 0.90 | 10 | ug/L | 40.0 | ND | 40.6 | 29-182 | 54.1 | 55 | |
| 4-Nitrophenol | 19.3 | 3.0 | 10 | ug/L | 40.0 | ND | 48.2 | 7-132 | 103 | 131 | |
| 4-Chloro-3-methylphenol | 35.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 89.0 | 22-147 | 3.95 | 73 | |
| Pentachlorophenol | 20.1 | 4.0 | 5.0 | ug/L | 40.0 | ND | 50.3 | 14-176 | 63.3 | 86 | |
| 2-Methylphenol (o-cresol) | 30.2 | 0.60 | 5.0 | ug/L | 40.0 | ND | 75.5 | 9-124 | 0.660 | 28 | |
| Phenol | 11.3 | 0.50 | 1.0 | ug/L | 40.0 | ND | 28.4 | 5-120 | 33.7 | 64 | |
| 2,4,6-Trichlorophenol | 16.8 | 0.70 | 10 | ug/L | 40.0 | ND | 41.9 | 37-144 | 34.2 | 58 | |
| Bis(2-chloroethoxy)methane | 28.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 72.4 | 33-184 | 0.277 | 54 | |
| Bis(2-chloroethyl)ether | 20.8 | 0.90 | 1.0 | ug/L | 40.0 | ND | 52.1 | 12-158 | 27.0 | 108 | |
| Bis(2-chloroisopropyl)ether | 21.7 | 1.0 | 2.0 | ug/L | 40.0 | ND | 54.2 | 36-166 | 21.3 | 76 | |
| Bis(2-ethylhexyl)phthalate | 45.2 | 3.0 | 5.0 | ug/L | 40.0 | ND | 113 | 8-158 | 62.2 | 82 | |
| 4-Bromophenyl phenyl ether | 37.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 92.8 | 53-127 | 14.4 | 43 | |
| Butyl benzyl phthalate | 24.6 | 0.60 | 10 | ug/L | 40.0 | ND | 61.5 | 2-152 | 8.52 | 60 | |
| 2-Chloronaphthalene | 27.7 | 0.60 | 10 | ug/L | 40.0 | ND | 69.2 | 60-120 | 5.96 | 24 | |
| 4-Chlorophenyl phenyl ether | 29.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 74.7 | 25-158 | 7.47 | 61 | |
| 1,2-Dichlorobenzene | 14.5 | 0.60 | 2.0 | ug/L | 40.0 | ND | 36.2 | 7-104 | 41.7 | 41 | QM-08 |
| 1,3-Dichlorobenzene | 12.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 30.3 | 1-106 | 53.9 | 41 | QM-08 |
| 1,4-Dichlorobenzene | 12.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 30.4 | 3-105 | 52.0 | 42 | QM-08 |
| Diethyl phthalate | 21.9 | 0.30 | 2.0 | ug/L | 40.0 | ND | 54.7 | 2-120 | 1.23 | 100 | |
| Dimethyl phthalate | 16.3 | 0.80 | 2.0 | ug/L | 40.0 | ND | 40.8 | 2-120 | 12.9 | 183 | |
| Di-n-butyl phthalate | 31.6 | 0.90 | 10 | ug/L | 40.0 | 1.19 | 76.0 | 1-120 | 16.3 | 47 | |
| 2,4-Dinitrotoluene | 31.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 79.8 | 39-139 | 16.7 | 42 | |
| 2,6-Dinitrotoluene | 33.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 84.1 | 50-158 | 16.9 | 48 | |
| Di-n-octyl phthalate | 27.3 | 0.60 | 10 | ug/L | 40.0 | ND | 68.3 | 4-146 | 33.2 | 69 | |
| 1,2-Diphenylhydrazine | 36.3 | 0.60 | 1.0 | ug/L | 40.0 | ND | 90.8 | 39-116 | 12.5 | 25 | |
| Hexachlorobenzene | 33.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 84.8 | 2-152 | 19.5 | 55 | |
| Hexachlorobutadiene | 17.2 | 0.80 | 1.0 | ug/L | 40.0 | ND | 43.1 | 24-120 | 23.6 | 62 | |
| Hexachlorocyclopentadiene | 16.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 40.5 | 10-93 | 24.2 | 55 | |
| Hexachloroethane | 12.3 | 0.60 | 1.0 | ug/L | 40.0 | ND | 30.7 | 40-120 | 49.6 | 52 | QM-05 |
| Isophorone | 31.5 | 0.30 | 1.0 | ug/L | 40.0 | ND | 78.7 | 21-196 | 8.89 | 93 | |
| Nitrobenzene | 23.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 58.4 | 35-180 | 9.66 | 62 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04605 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04605-MSD1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/01/20 | | | | | | |
| N-Nitrosodimethylamine | 7.76 | 0.30 | 5.0 | ug/L | 40.0 | ND | 19.4 | 10-84 | 85.2 | 59 | QM-08 |
| N-Nitrosodi-n-propylamine | 31.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 78.2 | 2-230 | 1.32 | 87 | |
| N-Nitrosodiphenylamine | 37.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 94.1 | 40-115 | 14.0 | 25 | |
| 1,2,4-Trichlorobenzene | 19.7 | 0.60 | 5.0 | ug/L | 40.0 | ND | 49.3 | 44-142 | 15.4 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.6* | | | *ug/L* | *40.0* | | *93.9* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *7.80* | | | *ug/L* | *40.0* | | *19.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *30.6* | | | *ug/L* | *40.0* | | *76.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *46.8* | | | *ug/L* | *40.0* | | *117* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *12.8* | | | *ug/L* | *40.0* | | *31.9* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *32.8* | | | *ug/L* | *40.0* | | *82.1* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04603 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04603-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *39.2* | | | *ug/L* | *40.0* | | *98.1* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.6* | | | *ug/L* | *40.0* | | *99.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.3* | | | *ug/L* | *40.0* | | *103* | *36-141* | | | |
| **LCS (AC04603-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.72 | 3.00 | 5.00 | ug/L | 79.4 | | 12.2 | 12-151 | | | |
| 3,3′-Dichlorobenzidine | 73.3 | 2.00 | 5.00 | ug/L | 79.4 | | 92.3 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.8* | | | *ug/L* | *40.0* | | *102* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.6* | | | *ug/L* | *40.0* | | *102* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| **Matrix Spike (AC04603-MS1)** | | **Source: 20C2474-01** | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.03 | 3.00 | 5.00 | ug/L | 79.4 | ND | 11.4 | 4-262 | | | |
| 3,3′-Dichlorobenzidine | 76.2 | 2.00 | 5.00 | ug/L | 79.4 | ND | 96.0 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.3* | | | *ug/L* | *40.0* | | *101* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *42.2* | | | *ug/L* | *40.0* | | *106* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *23.4* | | | *ug/L* | *40.0* | | *58.6* | *36-141* | | | |
| **Matrix Spike Dup (AC04603-MSD1)** | | **Source: 20C2474-01** | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.00 | 3.00 | 5.00 | ug/L | 79.4 | ND | 11.3 | 4-262 | 0.333 | 108 | |
| 3,3′-Dichlorobenzidine | 75.9 | 2.00 | 5.00 | ug/L | 79.4 | ND | 95.7 | 4-262 | 0.394 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *40.7* | | | *ug/L* | *40.0* | | *102* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *41.8* | | | *ug/L* | *40.0* | | *104* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *21.6* | | | *ug/L* | *40.0* | | *54.0* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03146 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03146-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *30.8* | | | *ug/L* | *40.0* | | *76.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *25.5* | | | *ug/L* | *40.0* | | *63.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.9* | | | *ug/L* | *40.0* | | *94.6* | *37-139* | | | |
| **LCS (AD03146-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Acenaphthene | 26.9 | 0.20 | 0.20 | ug/L | 40.0 | | 67.3 | 60-132 | | | |
| Acenaphthylene | 31.6 | 0.20 | 0.20 | ug/L | 40.0 | | 79.1 | 54-126 | | | |
| Anthracene | 32.0 | 0.090 | 0.20 | ug/L | 40.0 | | 80.0 | 43-120 | | | |
| Benzo (a) anthracene | 31.8 | 0.20 | 0.20 | ug/L | 40.0 | | 79.5 | 42-133 | | | |
| Benzo (a) pyrene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | | 92.4 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.4 | 0.20 | 0.20 | ug/L | 40.0 | | 91.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 39.3 | 0.10 | 0.20 | ug/L | 40.0 | | 98.4 | 2-195 | | | |
| Benzo (k) fluoranthene | 36.2 | 0.20 | 0.20 | ug/L | 40.0 | | 90.4 | 25-146 | | | |
| Chrysene | 31.3 | 0.20 | 0.20 | ug/L | 40.0 | | 78.2 | 44-140 | | | |
| Dibenz (a,h) anthracene | 38.9 | 0.10 | 0.20 | ug/L | 40.0 | | 97.3 | 2-200 | | | |
| Fluoranthene | 30.7 | 0.070 | 0.20 | ug/L | 40.0 | | 76.8 | 43-121 | | | |
| Fluorene | 29.0 | 0.20 | 0.20 | ug/L | 40.0 | | 72.5 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 38.9 | 0.030 | 0.20 | ug/L | 40.0 | | 97.4 | 2-151 | | | |
| Naphthalene | 20.4 | 0.090 | 0.20 | ug/L | 40.0 | | 50.9 | 36-120 | | | |
| Phenanthrene | 30.2 | 0.10 | 0.20 | ug/L | 40.0 | | 75.5 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03146 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03146-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Pyrene | 32.8 | 0.20 | 0.20 | ug/L | 40.0 | | 82.1 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *31.2* | | | *ug/L* | *40.0* | | *77.9* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *26.0* | | | *ug/L* | *40.0* | | *65.1* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.6* | | | *ug/L* | *40.0* | | *96.5* | *37-139* | | | |
| **Matrix Spike (AD03146-MS1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Acenaphthene | 25.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 62.4 | 47-145 | | | |
| Acenaphthylene | 29.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 74.0 | 33-145 | | | |
| Anthracene | 25.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 62.4 | 27-133 | | | |
| Benzo (a) anthracene | 23.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 58.9 | 33-143 | | | |
| Benzo (a) pyrene | 22.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 55.9 | 17-163 | | | |
| Benzo (b) fluoranthene | 22.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 56.7 | 24-159 | | | |
| Benzo (g,h,i) perylene | 21.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 54.3 | 2-219 | | | |
| Benzo (k) fluoranthene | 23.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 57.5 | 11-162 | | | |
| Chrysene | 23.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 59.6 | 17-168 | | | |
| Dibenz (a,h) anthracene | 21.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 53.5 | 2-227 | | | |
| Fluoranthene | 27.5 | 0.070 | 0.20 | ug/L | 40.0 | ND | 68.8 | 26-137 | | | |
| Fluorene | 24.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 60.9 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 21.5 | 0.030 | 0.20 | ug/L | 40.0 | ND | 53.8 | 2-171 | | | |
| Naphthalene | 21.6 | 0.090 | 0.20 | ug/L | 40.0 | ND | 54.0 | 21-133 | | | |
| Phenanthrene | 23.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 59.5 | 54-120 | | | |
| Pyrene | 31.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 78.1 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *28.6* | | | *ug/L* | *40.0* | | *71.4* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *23.7* | | | *ug/L* | *40.0* | | *59.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *27.8* | | | *ug/L* | *40.0* | | *69.6* | *37-139* | | | |
| **Matrix Spike Dup (AD03146-MSD1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Acenaphthene | 31.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.0 | 47-145 | 23.5 | 48 | |
| Acenaphthylene | 37.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.5 | 33-145 | 23.3 | 74 | |
| Anthracene | 32.3 | 0.090 | 0.20 | ug/L | 40.0 | ND | 80.8 | 27-133 | 25.8 | 66 | |
| Benzo (a) anthracene | 29.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 74.2 | 33-143 | 23.0 | 53 | |
| Benzo (a) pyrene | 29.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 73.2 | 17-163 | 26.7 | 72 | |
| Benzo (b) fluoranthene | 28.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.5 | 24-159 | 23.1 | 71 | |
| Benzo (g,h,i) perylene | 30.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 76.9 | 2-219 | 34.5 | 97 | |
| Benzo (k) fluoranthene | 29.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 73.2 | 11-162 | 24.1 | 63 | |
| Chrysene | 28.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.4 | 17-168 | 18.1 | 87 | |
| Dibenz (a,h) anthracene | 30.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 77.3 | 2-227 | 36.3 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Surface Water | 04/14/20 11:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03146 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03146-MSD1)** | | **Source: 20C2474-02** | | | Prepared: 03/25/20 Analyzed: 04/03/20 | | | | | | |
| Fluoranthene | 44.0 | 0.070 | 0.20 | ug/L | 40.0 | ND | 110 | 26-137 | 46.2 | 66 | |
| Fluorene | 28.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.9 | 59-121 | 15.1 | 38 | |
| Indeno (1,2,3-cd) pyrene | 29.9 | 0.030 | 0.20 | ug/L | 40.0 | ND | 74.7 | 2-171 | 32.6 | 99 | |
| Naphthalene | 36.1 | 0.090 | 0.20 | ug/L | 40.0 | ND | 90.2 | 21-133 | 50.3 | 65 | |
| Phenanthrene | 31.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 79.8 | 54-120 | 29.1 | 39 | |
| Pyrene | 30.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.1 | 52-120 | 2.59 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.6* | | | *ug/L* | *40.0* | | *94.1* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.4* | | | *ug/L* | *40.0* | | *96.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.3* | | | *ug/L* | *40.0* | | *73.3* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Surface Water | 04/14/20 11:17 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. 20C2474 Page ____ of ____

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Surface Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

2.1 C Ukiah

**Analysis Request**

**Sample Notes**

**TAT**

24 hr ○ 48 hr ○ Lab Approval Required

1 wk ○

2 wk (standard) ⊗

Lab Approval Required For Rush

| Field Sampler - Print Name & Signature | Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | 608 CTR Pest & PCBs | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide | Equis EDD | J Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David C Walter | WMSA-SW-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| | WMSA-SW-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | WMSA-SW-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | WMSA-SW-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | WMSA-SW-E | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | EMSA-SW-A | 3-18-2020 | 1200 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | EMSA-SW-B | | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | EMSA-SW-C | | 1430 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | EMSA-SW-D | | 1545 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | Duplicate | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | Blank | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | WC-SEEP-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | WC-SEEP-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | Trip Blank - Surface Water | 3-18-2020 | — | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walter | [signature] | 3/18/20 | 16:10 |
| [signature] | [signature] | 3-18-20 | 18:12 |
| [signature] | [signature] | 3-18-20 | 21:16 |
| | | | |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes ○ No (X)

Sampling Company Log Code:

Global ID: EDF to (Email Address)

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**

**20C2474**

Printed: 3/19/2020 8:59:17AM

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Surface Water |

Date Due: 04/02/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/18/20 21:16

Logged In By: Sean Foley — Date Logged In: 03/19/20 08:51

Samples Received at: 5.6 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C2474-01 EMSA-SW-A [Water] Sampled 03/18/20 12:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/15/20 12:00 | | |
| **20C2474-01 EMSA-SW-A [Water] Sampled 03/18/20 12:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/15/20 12:00 | | |
| **20C2474-02 EMSA-SW-B [Water] Sampled 03/18/20 13:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/15/20 13:00 | | |
| **20C2474-02 EMSA-SW-B [Water] Sampled 03/18/20 13:00 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/15/20 13:00 | | |
| **20C2474-03 EMSA-SW-C [Water] Sampled 03/18/20 14:30 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/15/20 14:30 | | |
| **20C2474-03 EMSA-SW-C [Water] Sampled 03/18/20 14:30 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/15/20 14:30 | | |
| **20C2474-04 EMSA-SW-D [Water] Sampled 03/18/20 15:45 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 | BAL Metals | 04/15/20 15:45 | | |
| **20C2474-04 EMSA-SW-D [Water] Sampled 03/18/20 15:45 (GMT-08:00) Pacific** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/15/20 15:45 | | |

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| | 3-19-20 | | | 3-19-20 | 13:45 |
| | 3-19-20 | | VW | 3/19/20 | 1700 |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C2614

Enclosed are the results of analyses for samples received by the laboratory on 03/19/20 20:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 13:18 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-2s | 20C2614-01 | Water | 03/19/20 11:50 | 03/19/20 20:30 |
| EMSA-DMW-2d | 20C2614-02 | Water | 03/19/20 10:40 | 03/19/20 20:30 |
| EMSA-DMW-8 | 20C2614-03 | Water | 03/19/20 13:30 | 03/19/20 20:30 |
| Blank - Ground Water | 20C2614-04 | Water | 03/19/20 00:00 | 03/19/20 20:30 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/27/20 22:13 | 03/27/20 22:13 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 01:01 | 03/28/20 01:01 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 01:19 | 03/28/20 01:19 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:20 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:20 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:38 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:20 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **5.7** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:33 | EPA 200.8 | SMP | 1551 | |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:38 | EPA 200.8 | SMP | 1551 | U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:38 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:33 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:20 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:29 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:29 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:56 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:29 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **3.1** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:42 | EPA 200.8 | SMP | 1551 | R-01, J |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:56 | EPA 200.8 | SMP | 1551 | U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 03:56 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 05:42 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 20:29 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 06:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic** | **4.7** | **4.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:47 | EPA 200.8 | SMP | 1551 | R-01, J |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:13 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 06:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 06:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 06:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:13 | EPA 200.8 | SMP | 1551 | U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:13 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 06:59 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:47 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/21/20 01:03 | 03/21/20 01:03 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/21/20 01:22 | 03/21/20 01:22 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04356 | 03/21/20 01:41 | 03/21/20 01:41 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:27 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **3.9** | **3.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:27 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Silver, dissolved** | **0.12** | **0.10** | **0.20** | **ug/L** | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:27 | EPA 200.8 | SMP | 1551 | R-01, J |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 04:36 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:45 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.5** | **4.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:40 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:40 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:40 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 00:53 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| **Mercury** | **2.51** | **2.00** | **5.00** | **ng/l** | 10 | AD03331 | 04/08/20 16:00 | 04/09/20 15:07 | EPA 1631E | AJC | 2728 | R-01, J |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| **Mercury** | **1.47** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 15:15 | EPA 1631E | AJC | 2728 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| **Mercury** | **0.298** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 15:23 | EPA 1631E | AJC | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 18:29 | EPA 1631E | AJC | 2728 | U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 18:37 | EPA 1631E | AJC | 2728 | U |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 18:45 | EPA 1631E | AJC | 2728 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:34 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:36 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03027 | 04/01/20 08:30 | 04/01/20 15:37 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 22:39 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 22:39 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *93.8 %* | *39-120* | | | *AC04713* | *03/25/20 13:30* | *03/26/20 22:39* | *8015DRO* | *DLD* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 23:14 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 23:14 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *87.7 %* | *39-120* | | | *AC04713* | *03/25/20 13:30* | *03/26/20 23:14* | *8015DRO* | *DLD* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 23:49 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/26/20 23:49 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *98.8 %* | *39-120* | | | *AC04713* | *03/25/20 13:30* | *03/26/20 23:49* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 22:56 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *104 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 22:56* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 23:30 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *96.0 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 23:30* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 04/01/20 00:05 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.9 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *04/01/20 00:05* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 13:20 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.7 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 13:55 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 14:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *110 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.3 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2614-04) Water Sampled: 03/19/20 00:00 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 15:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 13:20 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.7 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:20* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 13:55 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 13:55* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 14:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *110 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *97.3 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 14:30* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2614-04) Water Sampled: 03/19/20 00:00 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04324 | 03/20/20 11:00 | 03/20/20 15:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | | | *AC04324* | *03/20/20 11:00* | *03/20/20 15:04* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 22:56 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 22:56* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 22:56* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *117 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 22:56* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 23:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *119 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 23:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *111 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 23:30* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:05 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:05* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:05* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C2614-04) Water Sampled: 03/19/20 00:00 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 00:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *116 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *120 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 00:39* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.7** | **0.90** | **10** | **ug/L** | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:17 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *77.9 %* | *27-119* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *31.8 %* | *7-85* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *78.4 %* | *15-314* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *76.5 %* | *36-141* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *29.0 %* | *1-65* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *40.0 %* | *4-168* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:17* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **1.6** | **0.90** | **10** | **ug/L** | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 21:54 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *76.3 %* | *27-119* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *46.4 %* | *7-85* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *75.0 %* | *15-314* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *74.4 %* | *36-141* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *38.6 %* | *1-65* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *80.3 %* | *4-168* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 21:54* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-8 (20C2614-03) Water** | **Sampled: 03/19/20 13:30** | | **Received: 03/19/20 20:30** | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **3.3** | **0.90** | **10** | **ug/L** | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | **J** |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *11.7 %* | *27-119* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: 2-Fluorophenol* | | *82.3 %* | *7-85* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *14.9 %* | *15-314* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: p-Terphenyl-d14* | | *51.4 %* | *36-141* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *60.7 %* | *1-65* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *117 %* | *4-168* | | | *AC04712* | *03/26/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 05:42 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 05:42 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *90.8 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 05:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *91.7 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 05:42* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *55.4 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 05:42* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 06:16 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 06:16 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *93.3 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:16* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *97.8 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:16* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *61.0 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:16* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 06:50 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04603 | 03/25/20 08:00 | 04/01/20 06:50 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *104 %* | *27-119* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:50* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *104 %* | *15-314* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:50* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *68.3 %* | *36-141* | | | *AC04603* | *03/25/20 08:00* | *04/01/20 06:50* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2s (20C2614-01) Water Sampled: 03/19/20 11:50 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:06 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *62.0 %* | *24-119* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 01:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *71.8 %* | *15-314* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 01:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *97.4 %* | *37-139* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 01:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 01:44 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-2d (20C2614-02) Water Sampled: 03/19/20 10:40 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *81.8 %* | *24-119* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 13:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *118 %* | *15-314* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 13:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *76.4 %* | *37-139* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 13:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-8 (20C2614-03) Water Sampled: 03/19/20 13:30 Received: 03/19/20 20:30** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:21 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *21.0 %* | *24-119* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:21* | *EPA 625.1SIM* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *97.0 %* | *15-314* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:21* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *56.9 %* | *37-139* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:21* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04793 - General Prep** | | | | | | | | | | | |
| **Blank (AC04793-BLK1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04793-BS1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AC04793-DUP1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04793-MS1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.22 | 0.30 | 1.0 | ug/L | 10.0 | ND | 92.2 | 90-110 | | | |
| **Matrix Spike (AC04793-MS2)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | ND | 98.0 | 90-110 | | | |
| **Matrix Spike Dup (AC04793-MSD1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.19 | 0.30 | 1.0 | ug/L | 10.0 | ND | 91.9 | 90-110 | 0.358 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC04651-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04651-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.6 | 0.050 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Cadmium | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead | 18.4 | 0.060 | 0.25 | ug/L | 20.0 | | 92.0 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Thallium | 18.6 | 0.050 | 0.10 | ug/L | 20.0 | | 93.1 | 85-115 | | | |
| Zinc | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 2.22 | 1.6 | 2.0 | ug/L | | 2.11 | | | 5.08 | 20 | |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 2.40 | 1.6 | 2.0 | ug/L | | 2.45 | | | 2.05 | 20 | |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 3.36 | 1.2 | 2.0 | ug/L | | 3.23 | | | 3.89 | 20 | |
| Selenium | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Silver | ND | 0.050 | 0.10 | ug/L | | 0.0500 | | | 200 | 20 | U |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 41.7 | 16 | 20 | ug/L | | 41.6 | | | 0.327 | 20 | |
| **Matrix Spike (AC04651-MS1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 21.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Arsenic | 23.5 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 107 | 70-130 | | | |
| Beryllium | 22.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 18.7 | 2.0 | 2.0 | ug/L | 20.0 | ND | 93.5 | 70-130 | | | |
| Copper | 24.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | | | |
| Lead | 18.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 91.8 | 70-130 | | | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 95.7 | 70-130 | | | |
| Selenium | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 97.7 | 70-130 | | | |
| Thallium | 18.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Zinc | 143 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | | | |
| **Matrix Spike (AC04651-MS2)** | | **Source: 20C2440-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.1 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 21.5 | 1.6 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Beryllium | 21.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.8 | 70-130 | | | |
| Chromium | 20.2 | 2.0 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper | 23.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.32 | 103 | 70-130 | | | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Nickel | 20.9 | 1.2 | 2.0 | ug/L | 20.0 | 2.15 | 93.6 | 70-130 | | | |
| Selenium | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | 0.663 | 100 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Thallium | 18.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 92.0 | 70-130 | | | |
| Zinc | 107 | 16 | 20 | ug/L | 100 | ND | 107 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04651-MSD1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.56 | 20 | |
| Arsenic | 23.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 105 | 70-130 | 1.37 | 20 | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 110 | 70-130 | 2.14 | 20 | |
| Cadmium | 19.9 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.3 | 70-130 | 3.21 | 20 | |
| Chromium | 19.4 | 2.0 | 2.0 | ug/L | 20.0 | ND | 96.8 | 70-130 | 3.53 | 20 | |
| Copper | 24.1 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | 0.166 | 20 | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | 1.19 | 20 | |
| Nickel | 22.5 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 96.4 | 70-130 | 0.607 | 20 | |
| Selenium | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 100 | 70-130 | 0.781 | 20 | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 95.5 | 70-130 | 2.20 | 20 | |
| Thallium | 18.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 91.7 | 70-130 | 2.12 | 20 | |
| Zinc | 142 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | 0.651 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04356 - General Prep** | | | | | | | | | | | |
| **Blank (AC04356-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04356-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | | 98.0 | 90-110 | | | |
| **Duplicate (AC04356-DUP1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04356-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.79 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.9 | 90-110 | | | |
| **Matrix Spike (AC04356-MS2)** | | **Source: 20C2474-04** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.9 | 0.30 | 1.0 | ug/L | 10.0 | 1.20 | 97.3 | 90-110 | | | |
| **Matrix Spike Dup (AC04356-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 1.83 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04709-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0644 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04709-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.7 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic, dissolved | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Beryllium, dissolved | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Cadmium, dissolved | 20.1 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | | 98.8 | 85-115 | | | |
| Copper, dissolved | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead, dissolved | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 19.1 | 0.30 | 0.50 | ug/L | 20.0 | | 95.7 | 85-115 | | | |
| Selenium, dissolved | 19.0 | 0.30 | 2.0 | ug/L | 20.0 | | 95.2 | 85-115 | | | |
| Silver, dissolved | 19.5 | 0.050 | 0.10 | ug/L | 20.0 | | 97.3 | 85-115 | | | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 100 | 4.0 | 5.0 | ug/L | 100 | | 100 | 85-115 | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Antimony, dissolved | ND | 0.40 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.52 | 4.0 | 5.0 | ug/L | | 4.63 | | | 2.41 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | 0.776 | | | 200 | 20 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Silver, dissolved | 0.195 | 0.10 | 0.20 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC04709-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 25.0 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 102 | 70-130 | | | |
| Beryllium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.0 | 70-130 | | | |
| Cadmium, dissolved | 19.4 | 0.12 | 0.20 | ug/L | 20.0 | ND | 97.2 | 70-130 | | | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.5 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 20.7 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 99.5 | 70-130 | | | |
| Nickel, dissolved | 19.2 | 3.0 | 5.0 | ug/L | 20.0 | ND | 96.1 | 70-130 | | | |
| Selenium, dissolved | 18.8 | 0.60 | 4.0 | ug/L | 20.0 | ND | 94.2 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Thallium, dissolved | 20.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike Dup (AC04709-MSD1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | 0.0761 | 20 | |
| Arsenic, dissolved | 24.6 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 100 | 70-130 | 1.44 | 20 | |
| Beryllium, dissolved | 19.9 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.4 | 70-130 | 0.349 | 20 | |
| Cadmium, dissolved | 19.6 | 0.12 | 0.20 | ug/L | 20.0 | ND | 98.0 | 70-130 | 0.813 | 20 | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | 0.195 | 20 | |
| Copper, dissolved | 21.0 | 4.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.41 | 20 | |
| Lead, dissolved | 20.3 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 97.6 | 70-130 | 1.86 | 20 | |
| Nickel, dissolved | 18.9 | 3.0 | 5.0 | ug/L | 20.0 | ND | 94.6 | 70-130 | 1.52 | 20 | |
| Selenium, dissolved | 19.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 96.3 | 70-130 | 2.20 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 92.9 | 70-130 | 2.41 | 20 | |
| Thallium, dissolved | 20.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 3.21 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.549 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03331 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03331-BLK1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03331-BS1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 4.67 | 0.200 | 0.500 | ng/l | 5.00 | | 93.4 | 77-123 | | | |
| **Matrix Spike (AD03331-MS1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 29.0 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 88.0 | 71-125 | | | |
| **Matrix Spike (AD03331-MS2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 27.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 105 | 71-125 | | | |
| **Matrix Spike Dup (AD03331-MSD1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 28.8 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 87.2 | 71-125 | 0.726 | 24 | |
| **Matrix Spike Dup (AD03331-MSD2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 26.0 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 99.1 | 71-125 | 5.13 | 24 | |
| **Reference (AD03331-SRM1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 46.3 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Reference (AD03694-SRM1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 46.7 | 0.200 | 0.500 | ng/l | 50.0 | | 93.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03027 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03027-BLK1)** | | | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03027-BS1)** | | | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.185 | 0.0020 | 0.0030 | mg/L | 0.200 | | 92.7 | 85-115 | | | |
| **Duplicate (AD03027-DUP1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03027-MS1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.210 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 105 | 85-115 | | | |
| **Matrix Spike (AD03027-MS2)** | | **Source: 20C2583-07** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.218 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 109 | 85-115 | | | |
| **Matrix Spike Dup (AD03027-MSD1)** | | **Source: 20C2440-06** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.210 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 105 | 85-115 | 0.257 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04713 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04713-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *60.4* | | | *ug/L* | *57.4* | | *105* | *39-120* | | | |
| **LCS (AC04713-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | 1940 | 50 | 250 | ug/L | 2100 | | 92.5 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *55.5* | | | *ug/L* | *57.4* | | *96.7* | *39-120* | | | |
| **LCS (AC04713-BS2)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Motor Oil | 1470 | 100 | 250 | ug/L | 2010 | | 73.3 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *54.5* | | | *ug/L* | *57.4* | | *95.0* | *39-120* | | | |
| **LCS Dup (AC04713-BSD1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | 1870 | 50 | 250 | ug/L | 2100 | | 89.2 | 61-120 | 3.61 | 25 | |
| *Surrogate: Tetratetracontane* | *53.2* | | | *ug/L* | *57.4* | | *92.7* | *39-120* | | | |
| **LCS Dup (AC04713-BSD2)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Motor Oil | 1480 | 100 | 250 | ug/L | 2010 | | 73.7 | 71-125 | 0.558 | 25 | |
| *Surrogate: Tetratetracontane* | *63.7* | | | *ug/L* | *57.4* | | *111* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05006 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05006-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *76-129* | | | |
| **LCS (AC05006-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 152 | 50 | 50 | ug/L | 200 | | 75.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **LCS Dup (AC05006-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 173 | 50 | 50 | ug/L | 200 | | 86.5 | 67-132 | 13.2 | 25 | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *76-129* | | | |
| **Matrix Spike (AC05006-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 174 | 50 | 50 | ug/L | 200 | ND | 87.2 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC05006-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 159 | 50 | 50 | ug/L | 200 | ND | 79.5 | 37-156 | 9.24 | 25 | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *97.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04324 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04324-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.0* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.0* | | | *ug/L* | *25.0* | | *95.9* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04324-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Acrolein | 59.9 | 2.0 | 5.0 | ug/L | 50.0 | | 120 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.2* | | | *ug/L* | *25.0* | | *92.9* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.3* | | | *ug/L* | *25.0* | | *97.3* | *70-130* | | | |
| **LCS Dup (AC04324-BSD1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Acrolein | 61.4 | 2.0 | 5.0 | ug/L | 50.0 | | 123 | 60-140 | 2.37 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.0* | | | *ug/L* | *25.0* | | *100* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04324-MS1)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Acrolein | 66.3 | 2.0 | 5.0 | ug/L | 50.0 | ND | 133 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| **Matrix Spike Dup (AC04324-MSD1)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| Acrolein | 69.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 138 | 40-160 | 3.92 | 60 | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04324 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04324-BLK1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.0* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.0* | | | *ug/L* | *25.0* | | *95.9* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AC04324-BS1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 29.6 | 0.70 | 1.0 | ug/L | 25.0 | | 118 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *23.2* | | | *ug/L* | *25.0* | | *92.9* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.3* | | | *ug/L* | *25.0* | | *97.3* | *70-130* | | | |
| **LCS Dup (AC04324-BSD1)** | | | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 27.2 | 0.70 | 1.0 | ug/L | 25.0 | | 109 | 3-225 | 8.46 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.0* | | | *ug/L* | *25.0* | | *100* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04324-MS1)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 31.6 | 0.70 | 1.0 | ug/L | 25.0 | ND | 127 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.2* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| **Matrix Spike Dup (AC04324-MSD1)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/20/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.2 | 0.70 | 1.0 | ug/L | 25.0 | ND | 105 | 3-305 | 18.7 | 71 | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05007-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05007-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.9 | 0.30 | 0.30 | ug/L | 20.0 | | 99.6 | 65-135 | | | |
| Bromoform | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Carbon tetrachloride | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | | | |
| Chlorobenzene | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.0 | 65-135 | | | |
| Dibromochloromethane | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-135 | | | |
| Chloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.6 | 40-160 | | | |
| Chloroform | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-135 | | | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | | | |
| 1,1-Dichloroethene | 18.0 | 0.30 | 0.50 | ug/L | 20.0 | | 90.1 | 50-150 | | | |
| 1,2-Dichloropropane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | | 90.2 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.0 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 50-150 | | | |
| Ethylbenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 60-140 | | | |
| Bromomethane | 16.4 | 0.40 | 0.50 | ug/L | 20.0 | | 81.8 | 15-185 | | | |
| Chloromethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 2-205 | | | |
| Methylene chloride | 19.2 | 0.50 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.5 | 0.30 | 0.50 | ug/L | 20.0 | | 97.3 | 60-140 | | | |
| Tetrachloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| Toluene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | | | |
| Trichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.7 | 65-135 | | | |
| Vinyl chloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 65-135 | | | |
| 1,3-Dichlorobenzene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.5 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC05007-BSD1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 120 | 60-140 | 0.672 | 25 | |
| Benzene | 20.9 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 65-135 | 4.66 | 25 | |
| Bromoform | 22.9 | 0.30 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | 6.62 | 25 | |
| Carbon tetrachloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 4.66 | 25 | |
| Chlorobenzene | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 3.26 | 25 | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | | 121 | 70-135 | 7.17 | 25 | |
| Chloroethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.6 | 40-160 | 2.37 | 25 | |
| Chloroform | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-135 | 4.04 | 25 | |
| Bromodichloromethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | 3.81 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.88 | 25 | |
| 1,2-Dichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.10 | 25 | |
| 1,1-Dichloroethene | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | | 96.7 | 50-150 | 7.07 | 25 | |
| 1,2-Dichloropropane | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 35-165 | 2.90 | 25 | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.8 | 25-175 | 4.17 | 25 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 50-150 | 6.56 | 25 | |
| Ethylbenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 5.44 | 25 | |
| Bromomethane | 18.2 | 0.40 | 0.50 | ug/L | 20.0 | | 91.2 | 15-185 | 10.8 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 2-205 | 4.98 | 25 | |
| Methylene chloride | 19.7 | 0.50 | 0.50 | ug/L | 20.0 | | 98.5 | 60-140 | 2.62 | 25 | |
| 1,1,2,2-Tetrachloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.57 | 25 | |
| Tetrachloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.68 | 25 | |
| Toluene | 21.6 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 70-130 | 5.52 | 25 | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | 3.41 | 25 | |
| 1,1,1-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 8.60 | 25 | |
| 1,1,2-Trichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 4.00 | 25 | |
| Trichloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 4.55 | 25 | |
| Vinyl chloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.6 | 5-195 | 3.16 | 25 | |
| 1,2-Dichlorobenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 65-135 | 3.81 | 25 | |
| 1,3-Dichlorobenzene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 4.04 | 25 | |
| 1,4-Dichlorobenzene | 20.1 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 0.150 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05007-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | | | |
| Benzene | 22.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 111 | 37-151 | | | |
| Bromoform | 21.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 45-169 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 70-140 | | | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 53-149 | | | |
| Chloroethane | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.6 | 14-230 | | | |
| Chloroform | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 51-138 | | | |
| Bromodichloromethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 35-155 | | | |
| 1,1-Dichloroethane | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 59-155 | | | |
| 1,2-Dichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 49-155 | | | |
| 1,1-Dichloroethene | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.7 | 2-210 | | | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 91.8 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.2 | 17-183 | | | |
| Ethylbenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 37-162 | | | |
| Bromomethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 2-242 | | | |
| Chloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 2-273 | | | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.2 | 46-157 | | | |
| Tetrachloroethene | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | | | |
| Toluene | 22.6 | 0.30 | 0.30 | ug/L | 20.0 | ND | 113 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 52-150 | | | |
| Trichloroethene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 70-157 | | | |
| Vinyl chloride | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 2-251 | | | |
| 1,2-Dichlorobenzene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.0 | 0.10 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05007-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 113 | 40-160 | 3.77 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 0.898 | 61 | |
| Bromoform | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 45-169 | 7.64 | 42 | |
| Carbon tetrachloride | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | 5.44 | 41 | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0488 | 53 | |
| Dibromochloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 53-149 | 2.77 | 50 | |
| Chloroethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 14-230 | 4.35 | 78 | |
| Chloroform | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 51-138 | 1.10 | 54 | |
| Bromodichloromethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 35-155 | 4.65 | 56 | |
| 1,1-Dichloroethane | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | 1.94 | 40 | |
| 1,2-Dichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 49-155 | 2.11 | 49 | |
| 1,1-Dichloroethene | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 2-234 | 1.37 | 32 | |
| 1,2-Dichloropropane | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.4 | 2-210 | 3.87 | 55 | |
| cis-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.0 | 2-227 | 5.56 | 58 | |
| trans-1,3-Dichloropropene | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 17-183 | 3.44 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 4.37 | 63 | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-242 | 7.58 | 61 | |
| Chloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 2-273 | 0.502 | 60 | |
| Methylene chloride | 20.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 103 | 2-221 | 3.01 | 28 | |
| 1,1,2,2-Tetrachloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 46-157 | 2.05 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 0.446 | 39 | |
| Toluene | 23.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 1.97 | 41 | |
| trans-1,2-Dichloroethene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | 0.655 | 45 | |
| 1,1,1-Trichloroethane | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 52-162 | 1.41 | 36 | |
| 1,1,2-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-150 | 0.599 | 45 | |
| Trichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 70-157 | 1.94 | 48 | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | 6.33 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 1.88 | 57 | |
| 1,3-Dichlorobenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 59-156 | 3.18 | 43 | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | 2.22 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04712-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 2.45 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04712-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *19.2* | | | *ug/L* | *40.0* | | *48.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *18.6* | | | *ug/L* | *40.0* | | *46.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *31.0* | | | *ug/L* | *40.0* | | *77.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.9* | | | *ug/L* | *40.0* | | *89.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *15.1* | | | *ug/L* | *40.0* | | *37.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *29.6* | | | *ug/L* | *40.0* | | *73.9* | *4-168* | | | |
| **LCS (AC04712-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 22.0 | 0.70 | 5.0 | ug/L | 40.0 | | 54.9 | 36-120 | | | |
| 2,4-Dichlorophenol | 24.5 | 0.70 | 5.0 | ug/L | 40.0 | | 61.4 | 53-122 | | | |
| 2,4-Dimethylphenol | 39.6 | 1.0 | 2.0 | ug/L | 50.0 | | 79.3 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 26.4 | 3.0 | 5.0 | ug/L | 40.0 | | 66.0 | 53-130 | | | |
| 2,4-Dinitrophenol | 21.9 | 5.0 | 5.0 | ug/L | 50.0 | | 43.8 | 10-173 | | | |
| 2-Nitrophenol | 18.6 | 0.90 | 10 | ug/L | 40.0 | | 46.5 | 45-167 | | | |
| 4-Nitrophenol | 10.5 | 3.0 | 10 | ug/L | 40.0 | | 26.4 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 35.3 | 1.0 | 1.0 | ug/L | 40.0 | | 88.3 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 31.3 | 0.60 | 5.0 | ug/L | 40.0 | | 78.3 | 36-102 | | | |
| Pentachlorophenol | 30.1 | 4.0 | 5.0 | ug/L | 40.0 | | 75.2 | 38-152 | | | |
| Phenol | 15.2 | 0.50 | 1.0 | ug/L | 40.0 | | 38.0 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 23.5 | 0.70 | 10 | ug/L | 40.0 | | 58.6 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 32.9 | 0.90 | 5.0 | ug/L | 40.0 | | 82.3 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 29.8 | 0.90 | 1.0 | ug/L | 40.0 | | 74.5 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.3 | 1.0 | 2.0 | ug/L | 40.0 | | 73.3 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 39.5 | 3.0 | 5.0 | ug/L | 40.0 | | 98.7 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 31.6 | 1.0 | 5.0 | ug/L | 40.0 | | 78.9 | 65-120 | | | |
| Butyl benzyl phthalate | 17.0 | 0.60 | 10 | ug/L | 40.0 | | 42.6 | 2-140 | | | |
| 2-Chloronaphthalene | 26.8 | 0.60 | 10 | ug/L | 40.0 | | 67.1 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 29.7 | 0.90 | 5.0 | ug/L | 40.0 | | 74.2 | 38-145 | | | |
| 1,4-Dichlorobenzene | 22.7 | 0.60 | 1.0 | ug/L | 40.0 | | 56.8 | 32-91 | | | |
| 1,2-Dichlorobenzene | 24.7 | 0.60 | 2.0 | ug/L | 40.0 | | 61.8 | 33-93 | | | |
| 1,3-Dichlorobenzene | 23.0 | 0.60 | 1.0 | ug/L | 40.0 | | 57.5 | 31-92 | | | |
| Diethyl phthalate | 20.7 | 0.30 | 2.0 | ug/L | 40.0 | | 51.8 | 2-120 | | | |
| Dimethyl phthalate | 9.36 | 0.80 | 2.0 | ug/L | 40.0 | | 23.4 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04712-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Di-n-butyl phthalate | 35.7 | 0.90 | 10 | ug/L | 40.0 | | 89.3 | 8-120 | | | |
| 2,4-Dinitrotoluene | 30.6 | 0.80 | 5.0 | ug/L | 40.0 | | 76.5 | 48-127 | | | |
| 2,6-Dinitrotoluene | 33.3 | 0.80 | 5.0 | ug/L | 40.0 | | 83.2 | 68-137 | | | |
| Di-n-octyl phthalate | 13.7 | 0.60 | 10 | ug/L | 40.0 | | 34.2 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 33.9 | 0.60 | 1.0 | ug/L | 40.0 | | 84.8 | 52-115 | | | |
| Hexachlorobenzene | 32.2 | 0.90 | 1.0 | ug/L | 40.0 | | 80.6 | 8-142 | | | |
| Hexachlorobutadiene | 24.1 | 0.80 | 1.0 | ug/L | 40.0 | | 60.3 | 38-120 | | | |
| Hexachlorocyclopentadiene | 12.8 | 4.0 | 5.0 | ug/L | 40.0 | | 32.1 | 16-93 | | | |
| Hexachloroethane | 23.5 | 0.60 | 1.0 | ug/L | 40.0 | | 58.8 | 55-120 | | | |
| Isophorone | 34.9 | 0.30 | 1.0 | ug/L | 40.0 | | 87.3 | 47-180 | | | |
| Nitrobenzene | 28.0 | 0.90 | 1.0 | ug/L | 40.0 | | 70.0 | 54-158 | | | |
| N-Nitrosodimethylamine | 24.2 | 0.30 | 5.0 | ug/L | 40.0 | | 60.5 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 34.3 | 0.80 | 5.0 | ug/L | 40.0 | | 85.7 | 14-198 | | | |
| N-Nitrosodiphenylamine | 33.8 | 1.0 | 1.0 | ug/L | 40.0 | | 84.5 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 23.1 | 0.60 | 5.0 | ug/L | 40.0 | | 57.8 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.2* | | | *ug/L* | *40.0* | | *85.5* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *18.2* | | | *ug/L* | *40.0* | | *45.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.6* | | | *ug/L* | *40.0* | | *84.1* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.4* | | | *ug/L* | *40.0* | | *88.4* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.0* | | | *ug/L* | *40.0* | | *40.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.0* | | | *ug/L* | *40.0* | | *92.5* | *4-168* | | | |
| **Matrix Spike (AC04712-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 31.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 78.9 | 23-134 | | | |
| 2,4-Dichlorophenol | 32.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 81.1 | 39-135 | | | |
| 2,4-Dimethylphenol | 7.81 | 1.0 | 2.0 | ug/L | 50.0 | ND | 15.6 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 11.7 | 3.0 | 5.0 | ug/L | 40.0 | ND | 29.3 | 7-181 | | | |
| 2,4-Dinitrophenol | 6.11 | 5.0 | 5.0 | ug/L | 50.0 | ND | 12.2 | 10-191 | | | |
| 2-Nitrophenol | 31.6 | 0.90 | 10 | ug/L | 40.0 | ND | 79.0 | 29-182 | | | |
| 4-Nitrophenol | 9.51 | 3.0 | 10 | ug/L | 40.0 | ND | 23.8 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 31.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 78.8 | 22-147 | | | |
| Pentachlorophenol | 5.95 | 4.0 | 5.0 | ug/L | 40.0 | ND | 14.9 | 14-176 | | | |
| 2-Methylphenol (o-cresol) | 28.3 | 0.60 | 5.0 | ug/L | 40.0 | ND | 70.8 | 9-124 | | | |
| Phenol | 17.2 | 0.50 | 1.0 | ug/L | 40.0 | ND | 43.1 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 24.3 | 0.70 | 10 | ug/L | 40.0 | ND | 60.7 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 34.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 87.2 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 34.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 87.3 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04712-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 37.2 | 1.0 | 2.0 | ug/L | 40.0 | ND | 93.1 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 26.2 | 3.0 | 5.0 | ug/L | 40.0 | ND | 65.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 30.3 | 1.0 | 5.0 | ug/L | 40.0 | ND | 75.8 | 53-127 | | | |
| Butyl benzyl phthalate | 35.6 | 0.60 | 10 | ug/L | 40.0 | ND | 89.0 | 2-152 | | | |
| 2-Chloronaphthalene | 31.1 | 0.60 | 10 | ug/L | 40.0 | ND | 77.7 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 28.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 71.0 | 25-158 | | | |
| 1,2-Dichlorobenzene | 26.8 | 0.60 | 2.0 | ug/L | 40.0 | ND | 67.1 | 7-104 | | | |
| 1,3-Dichlorobenzene | 24.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 60.0 | 1-106 | | | |
| 1,4-Dichlorobenzene | 25.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.7 | 3-105 | | | |
| Diethyl phthalate | 31.7 | 0.30 | 2.0 | ug/L | 40.0 | ND | 79.2 | 2-120 | | | |
| Dimethyl phthalate | 26.0 | 0.80 | 2.0 | ug/L | 40.0 | ND | 64.9 | 2-120 | | | |
| Di-n-butyl phthalate | 55.6 | 0.90 | 10 | ug/L | 40.0 | 1.70 | 135 | 1-120 | | | QM-05 |
| 2,4-Dinitrotoluene | 35.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 89.1 | 39-139 | | | |
| 2,6-Dinitrotoluene | 39.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 97.6 | 50-158 | | | |
| Di-n-octyl phthalate | 37.7 | 0.60 | 10 | ug/L | 40.0 | ND | 94.2 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 31.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 79.5 | 39-116 | | | |
| Hexachlorobenzene | 28.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 71.8 | 2-152 | | | |
| Hexachlorobutadiene | 25.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 64.3 | 24-120 | | | |
| Hexachlorocyclopentadiene | 19.7 | 4.0 | 5.0 | ug/L | 40.0 | ND | 49.2 | 10-93 | | | |
| Hexachloroethane | 27.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 68.4 | 40-120 | | | |
| Isophorone | 35.9 | 0.30 | 1.0 | ug/L | 40.0 | ND | 89.6 | 21-196 | | | |
| Nitrobenzene | 30.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 76.1 | 35-180 | | | |
| N-Nitrosodimethylamine | 13.4 | 0.30 | 5.0 | ug/L | 40.0 | ND | 33.4 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 40.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 102 | 2-230 | | | |
| N-Nitrosodiphenylamine | 34.3 | 1.0 | 1.0 | ug/L | 40.0 | ND | 85.8 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 24.6 | 0.60 | 5.0 | ug/L | 40.0 | ND | 61.5 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.6* | | | *ug/L* | *40.0* | | *94.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *15.6* | | | *ug/L* | *40.0* | | *39.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.6* | | | *ug/L* | *40.0* | | *84.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *24.7* | | | *ug/L* | *40.0* | | *61.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.7* | | | *ug/L* | *40.0* | | *41.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *24.7* | | | *ug/L* | *40.0* | | *61.8* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04712-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 29.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.0 | 23-134 | 7.87 | 61 | |
| 2,4-Dichlorophenol | 29.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.4 | 39-135 | 9.97 | 50 | |
| 2,4-Dimethylphenol | 8.96 | 1.0 | 2.0 | ug/L | 50.0 | ND | 17.9 | 32-120 | 13.7 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 11.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 29.0 | 7-181 | 1.12 | 203 | |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 50.0 | ND | | 10-191 | 200 | 132 | QM-05, QM-08, U |
| 2-Nitrophenol | 31.3 | 0.90 | 10 | ug/L | 40.0 | ND | 78.2 | 29-182 | 1.08 | 55 | |
| 4-Nitrophenol | 5.39 | 3.0 | 10 | ug/L | 40.0 | ND | 13.5 | 7-132 | 55.3 | 131 | J |
| 4-Chloro-3-methylphenol | 27.2 | 1.0 | 1.0 | ug/L | 40.0 | ND | 68.0 | 22-147 | 14.8 | 73 | |
| 2-Methylphenol (o-cresol) | 25.1 | 0.60 | 5.0 | ug/L | 40.0 | ND | 62.6 | 9-124 | 12.2 | 28 | |
| Pentachlorophenol | 5.48 | 4.0 | 5.0 | ug/L | 40.0 | ND | 13.7 | 14-176 | 8.22 | 86 | QM-05 |
| Phenol | 16.0 | 0.50 | 1.0 | ug/L | 40.0 | ND | 40.1 | 5-120 | 7.22 | 64 | |
| 2,4,6-Trichlorophenol | 16.2 | 0.70 | 10 | ug/L | 40.0 | ND | 40.6 | 37-144 | 39.7 | 58 | |
| Bis(2-chloroethoxy)methane | 34.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 84.9 | 33-184 | 2.76 | 54 | |
| Bis(2-chloroethyl)ether | 34.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 86.2 | 12-158 | 1.27 | 108 | |
| Bis(2-chloroisopropyl)ether | 34.5 | 1.0 | 2.0 | ug/L | 40.0 | ND | 86.2 | 36-166 | 7.75 | 76 | |
| Bis(2-ethylhexyl)phthalate | 17.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 44.5 | 8-158 | 38.1 | 82 | |
| 4-Bromophenyl phenyl ether | 27.5 | 1.0 | 5.0 | ug/L | 40.0 | ND | 68.7 | 53-127 | 9.79 | 43 | |
| Butyl benzyl phthalate | 24.8 | 0.60 | 10 | ug/L | 40.0 | ND | 62.0 | 2-152 | 35.8 | 60 | |
| 2-Chloronaphthalene | 21.1 | 0.60 | 10 | ug/L | 40.0 | ND | 52.7 | 60-120 | 38.4 | 24 | QM-05, QM-08 |
| 4-Chlorophenyl phenyl ether | 19.1 | 0.90 | 5.0 | ug/L | 40.0 | ND | 47.8 | 25-158 | 39.0 | 61 | |
| 1,3-Dichlorobenzene | 25.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.4 | 1-106 | 5.55 | 41 | |
| 1,2-Dichlorobenzene | 28.0 | 0.60 | 2.0 | ug/L | 40.0 | ND | 70.1 | 7-104 | 4.37 | 41 | |
| 1,4-Dichlorobenzene | 25.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.9 | 3-105 | 0.313 | 42 | |
| Diethyl phthalate | 19.0 | 0.30 | 2.0 | ug/L | 40.0 | ND | 47.4 | 2-120 | 50.3 | 100 | |
| Dimethyl phthalate | 14.9 | 0.80 | 2.0 | ug/L | 40.0 | ND | 37.3 | 2-120 | 53.9 | 183 | |
| Di-n-butyl phthalate | 41.4 | 0.90 | 10 | ug/L | 40.0 | 1.70 | 99.4 | 1-120 | 29.2 | 47 | |
| 2,4-Dinitrotoluene | 22.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 55.3 | 39-139 | 46.9 | 42 | QM-08 |
| 2,6-Dinitrotoluene | 24.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 59.9 | 50-158 | 47.9 | 48 | |
| Di-n-octyl phthalate | 24.3 | 0.60 | 10 | ug/L | 40.0 | ND | 60.7 | 4-146 | 43.2 | 69 | |
| 1,2-Diphenylhydrazine | 28.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 70.0 | 39-116 | 12.8 | 25 | |
| Hexachlorobenzene | 25.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 63.8 | 2-152 | 11.8 | 55 | |
| Hexachlorobutadiene | 27.6 | 0.80 | 1.0 | ug/L | 40.0 | ND | 69.0 | 24-120 | 6.98 | 62 | |
| Hexachlorocyclopentadiene | 13.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 32.6 | 10-93 | 40.6 | 55 | |
| Hexachloroethane | 26.7 | 0.60 | 1.0 | ug/L | 40.0 | ND | 66.6 | 40-120 | 2.56 | 52 | |
| Isophorone | 35.0 | 0.30 | 1.0 | ug/L | 40.0 | ND | 87.6 | 21-196 | 2.34 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04712-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Nitrobenzene | 32.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 80.4 | 35-180 | 5.50 | 62 | |
| N-Nitrosodimethylamine | 12.3 | 0.30 | 5.0 | ug/L | 40.0 | ND | 30.8 | 10-84 | 8.34 | 59 | |
| N-Nitrosodi-n-propylamine | 37.8 | 0.80 | 5.0 | ug/L | 40.0 | ND | 94.4 | 2-230 | 7.96 | 87 | |
| N-Nitrosodiphenylamine | 29.1 | 1.0 | 1.0 | ug/L | 40.0 | ND | 72.8 | 40-115 | 16.4 | 25 | |
| 1,2,4-Trichlorobenzene | 26.6 | 0.60 | 5.0 | ug/L | 40.0 | ND | 66.5 | 44-142 | 7.82 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *22.8* | | | *ug/L* | *40.0* | | *57.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.4* | | | *ug/L* | *40.0* | | *43.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.2* | | | *ug/L* | *40.0* | | *85.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *23.8* | | | *ug/L* | *40.0* | | *59.5* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.9* | | | *ug/L* | *40.0* | | *37.3* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *21.8* | | | *ug/L* | *40.0* | | *54.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04603 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04603-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *39.2* | | | *ug/L* | *40.0* | | *98.1* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.6* | | | *ug/L* | *40.0* | | *99.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.3* | | | *ug/L* | *40.0* | | *103* | *36-141* | | | |
| **LCS (AC04603-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.72 | 3.00 | 5.00 | ug/L | 79.4 | | 12.2 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 73.3 | 2.00 | 5.00 | ug/L | 79.4 | | 92.3 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.8* | | | *ug/L* | *40.0* | | *102* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.6* | | | *ug/L* | *40.0* | | *102* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| **Matrix Spike (AC04603-MS1)** | | **Source: 20C2474-01** | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.03 | 3.00 | 5.00 | ug/L | 79.4 | ND | 11.4 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 76.2 | 2.00 | 5.00 | ug/L | 79.4 | ND | 96.0 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *40.3* | | | *ug/L* | *40.0* | | *101* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *42.2* | | | *ug/L* | *40.0* | | *106* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *23.4* | | | *ug/L* | *40.0* | | *58.6* | *36-141* | | | |
| **Matrix Spike Dup (AC04603-MSD1)** | | **Source: 20C2474-01** | | | Prepared: 03/25/20 Analyzed: 03/31/20 | | | | | | |
| Benzidine | 9.00 | 3.00 | 5.00 | ug/L | 79.4 | ND | 11.3 | 4-262 | 0.333 | 108 | |
| 3,3´-Dichlorobenzidine | 75.9 | 2.00 | 5.00 | ug/L | 79.4 | ND | 95.7 | 4-262 | 0.394 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *40.7* | | | *ug/L* | *40.0* | | *102* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *41.8* | | | *ug/L* | *40.0* | | *104* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *21.6* | | | *ug/L* | *40.0* | | *54.0* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03389-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *26.7* | | | *ug/L* | *40.0* | | *66.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *17.0* | | | *ug/L* | *40.0* | | *42.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.5* | | | *ug/L* | *40.0* | | *93.8* | *37-139* | | | |
| **LCS (AD03389-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | 30.2 | 0.20 | 0.20 | ug/L | 40.0 | | 75.6 | 60-132 | | | |
| Acenaphthylene | 29.2 | 0.20 | 0.20 | ug/L | 40.0 | | 73.0 | 54-126 | | | |
| Anthracene | 33.9 | 0.090 | 0.20 | ug/L | 40.0 | | 84.8 | 43-120 | | | |
| Benzo (a) anthracene | 32.4 | 0.20 | 0.20 | ug/L | 40.0 | | 81.0 | 42-133 | | | |
| Benzo (a) pyrene | 37.2 | 0.20 | 0.20 | ug/L | 40.0 | | 92.9 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | | 92.3 | 42-140 | | | |
| Benzo (g,h,i) perylene | 48.8 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-195 | | | |
| Benzo (k) fluoranthene | 36.7 | 0.20 | 0.20 | ug/L | 40.0 | | 91.8 | 25-146 | | | |
| Chrysene | 33.6 | 0.20 | 0.20 | ug/L | 40.0 | | 84.0 | 44-140 | | | |
| Dibenz (a,h) anthracene | 48.9 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-200 | | | |
| Fluoranthene | 31.9 | 0.070 | 0.20 | ug/L | 40.0 | | 79.8 | 43-121 | | | |
| Fluorene | 41.6 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 45.3 | 0.030 | 0.20 | ug/L | 40.0 | | 113 | 2-151 | | | |
| Naphthalene | 22.1 | 0.090 | 0.20 | ug/L | 40.0 | | 55.2 | 36-120 | | | |
| Phenanthrene | 34.5 | 0.10 | 0.20 | ug/L | 40.0 | | 86.2 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03389-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Pyrene | 32.7 | 0.20 | 0.20 | ug/L | 40.0 | | 81.8 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *31.4* | | | *ug/L* | *40.0* | | *78.5* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.7* | | | *ug/L* | *40.0* | | *74.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *37-139* | | | |
| **Matrix Spike (AD03389-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | 31.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 77.6 | 47-145 | | | |
| Acenaphthylene | 33.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.8 | 33-145 | | | |
| Anthracene | 34.5 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.2 | 27-133 | | | |
| Benzo (a) anthracene | 27.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.1 | 33-143 | | | |
| Benzo (a) pyrene | 20.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 51.4 | 17-163 | | | |
| Benzo (b) fluoranthene | 22.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 55.8 | 24-159 | | | |
| Benzo (g,h,i) perylene | 20.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 51.6 | 2-219 | | | |
| Benzo (k) fluoranthene | 23.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 58.7 | 11-162 | | | |
| Chrysene | 28.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.7 | 17-168 | | | |
| Dibenz (a,h) anthracene | 22.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 56.0 | 2-227 | | | |
| Fluoranthene | 34.1 | 0.070 | 0.20 | ug/L | 40.0 | ND | 85.2 | 26-137 | | | |
| Fluorene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.2 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 21.1 | 0.030 | 0.20 | ug/L | 40.0 | ND | 52.8 | 2-171 | | | |
| Naphthalene | 25.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 64.2 | 21-133 | | | |
| Phenanthrene | 34.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 87.0 | 54-120 | | | |
| Pyrene | 37.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.4 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.1* | | | *ug/L* | *40.0* | | *80.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.6* | | | *ug/L* | *40.0* | | *93.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *31.5* | | | *ug/L* | *40.0* | | *78.8* | *37-139* | | | |
| **Matrix Spike Dup (AD03389-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | 31.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.0 | 47-145 | 1.88 | 48 | |
| Acenaphthylene | 35.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 88.1 | 33-145 | 5.06 | 74 | |
| Anthracene | 34.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.0 | 27-133 | 0.174 | 66 | |
| Benzo (a) anthracene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.3 | 33-143 | 3.14 | 53 | |
| Benzo (a) pyrene | 21.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 54.7 | 17-163 | 6.08 | 72 | |
| Benzo (b) fluoranthene | 23.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 59.6 | 24-159 | 6.54 | 71 | |
| Benzo (g,h,i) perylene | 26.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 66.6 | 2-219 | 25.2 | 97 | |
| Benzo (k) fluoranthene | 24.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 60.1 | 11-162 | 2.36 | 63 | |
| Chrysene | 27.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 69.6 | 17-168 | 2.97 | 87 | |
| Dibenz (a,h) anthracene | 28.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 72.1 | 2-227 | 25.3 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 13:18 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03389-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/10/20 | | | | | | |
| Fluoranthene | 34.0 | 0.070 | 0.20 | ug/L | 40.0 | ND | 85.0 | 26-137 | 0.235 | 66 | |
| Fluorene | 39.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 98.1 | 59-121 | 6.17 | 38 | |
| Indeno (1,2,3-cd) pyrene | 26.4 | 0.030 | 0.20 | ug/L | 40.0 | ND | 66.0 | 2-171 | 22.2 | 99 | |
| Naphthalene | 24.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 60.0 | 21-133 | 6.64 | 65 | |
| Phenanthrene | 34.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 85.8 | 54-120 | 1.36 | 39 | |
| Pyrene | 33.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.4 | 52-120 | 11.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.7* | | | *ug/L* | *40.0* | | *81.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.5* | | | *ug/L* | *40.0* | | *68.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.2* | | | *ug/L* | *40.0* | | *70.6* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 13:18 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

alpha Analytical Laboratories
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C2614



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side

2.3°C Ukiah

**Analysis Request**

**Sample Notes**

**TAT**

24 hr ( ) 48 hr ( ) Lab Approval Required 1 wk ( ) 2 wk (standard) (X) — Lab Approval Required For Rush

Field Sampler - Print Name & Signature: David Walter David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | 3-19-2020 | 1150 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | " | 1040 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | 3-19-2020 | 1330 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-19-2020 | - | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Relinquished by: David C Walt | Received by: | Date: 3/19/20 | Time: 1551 |
| Relinquished by: | Received by: Pete Hathaway @ | Date: 3-19-20 | Time: 18:03 |
| Relinquished by: Pete Hathaway @ | Received by: Pete Hathaway @ | Date: 3-19-20 | Time: 2030 |
| Relinquished by: | Received by: | Date: | Time: |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ( )

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**

**Printed: 3/20/2020 12:47:57PM**

**20C2614**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | | | |
|---|---|---|---|
| **Client:** | **Golder Associates - Sunnyvale** | **Project Manager:** | **Robbie C. Phillips** |
| **Project:** | **EMSA/WMSA Sampling** | **Project Number:** | **Ground Water** |

| | | | |
|---|---|---|---|
| Date Due: | 04/06/20 15:00 (10 day TAT) | | |
| Received By: | Pete L. Hathaway | Date Received: | 03/20/20 20:30 |
| Logged In By: | Aaron J. Kooyers | Date Logged In: | 03/20/20 08:55 |

Samples Received at: 5.8 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C2614-01 EMSA-DMW-2s [Water] Sampled 03/19/20 11:50 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/16/20 11:50 | | |
| **20C2614-01 EMSA-DMW-2s [Water] Sampled 03/19/20 11:50 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/16/20 11:50 | | |
| **20C2614-02 EMSA-DMW-2d [Water] Sampled 03/19/20 10:40 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/16/20 10:40 | | |
| **20C2614-02 EMSA-DMW-2d [Water] Sampled 03/19/20 10:40 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/16/20 10:40 | | |
| **20C2614-03 EMSA-DMW-8 [Water] Sampled 03/19/20 13:30 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 | BAL Metals | 04/16/20 13:30 | | |
| **20C2614-03 EMSA-DMW-8 [Water] Sampled 03/19/20 13:30 (GMT-08:00) Pacific Time (US** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/16/20 13:30 | | |

| | | | | | |
|---|---|---|---|---|---|
| | 3-20-20 | | | 3-23-20 | 14:29 |
| Relinquished By | Date | Time | Received By | Date | Time |
| | 3-23-20 | | VW | 3/23/20 | ~~1700~~ 1800 VW 3/23 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C2864

Enclosed are the results of analyses for samples received by the laboratory on 03/23/20 21:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 14:37 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-1s | 20C2864-01 | Water | 03/23/20 13:00 | 03/23/20 21:35 |
| WMSA-DMW-1d | 20C2864-02 | Water | 03/23/20 12:00 | 03/23/20 21:35 |
| Blank - Ground Water | 20C2864-03 | Water | 03/23/20 00:00 | 03/23/20 21:35 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 01:38 | 03/28/20 01:38 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 01:56 | 03/28/20 01:56 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:55 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:55 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:30 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:55 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **20** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:07 | EPA 200.8 | SMP | 1551 | |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:30 | EPA 200.8 | SMP | 1551 | U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:30 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:07 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 21:55 | EPA 200.8 | SMP | 1551 | R-01, U |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 22:04 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 22:04 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 22:04 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel** | **4.8** | **3.0** | **5.0** | **ug/L** | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:16 | EPA 200.8 | SMP | 1551 | R-01, J |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:47 | EPA 200.8 | SMP | 1551 | U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AC04651 | 03/26/20 13:20 | 04/01/20 04:47 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 07:16 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AC04651 | 03/26/20 13:20 | 03/31/20 22:04 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 18:02 | 03/30/20 18:02 | EPA 218.6 | LRN | 1551 | U |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 18:20 | 03/30/20 18:20 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:57 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **17** | **3.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:57 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 15:57 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 16:14 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **3.7** | **3.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, J |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 16:14 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 16:14 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/02/20 01:11 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water** | **Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | |
| **Mercury** | **0.404** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 15:31 | EPA 1631E | AJC | 2728 | J |
| **WMSA-DMW-1d (20C2864-02) Water** | **Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | |
| **Mercury** | **0.257** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 15:39 | EPA 1631E | AJC | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water** | **Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | |
| **Mercury, dissolved** | **0.259** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 18:53 | EPA 1631E | AJC | 2728 | J |
| **WMSA-DMW-1d (20C2864-02) Water** | **Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 19:01 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03028 | 04/01/20 08:30 | 04/01/20 16:07 | 10-204-00-1X | EV | 1551 | U |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03028 | 04/01/20 08:30 | 04/01/20 16:09 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/27/20 00:24 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/27/20 00:24 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *94.1 %* | *39-120* | | | *AC04713* | *03/25/20 13:30* | *03/27/20 00:24* | *8015DRO* | *DLD* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/27/20 00:58 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04713 | 03/25/20 13:30 | 03/27/20 00:58 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *86.0 %* | *39-120* | | | *AC04713* | *03/25/20 13:30* | *03/27/20 00:58* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 16:04 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.0 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 16:04* | *8260GRO* | *JV* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 03/31/20 16:39 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.8 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *03/31/20 16:39* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 18:02 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *102 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 18:37 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *98.0 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2864-03) Water Sampled: 03/23/20 00:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 19:11 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.6 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 18:02 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:02* | *EPA 624.1* | *JV* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 18:37 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *109 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *98.0 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 18:37* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C2864-03) Water Sampled: 03/23/20 00:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 19:11 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *106 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.6 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 19:11* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *120 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *113 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:04* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 16:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *122 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *124 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 16:39* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C2864-03) Water Sampled: 03/23/20 00:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 03/31/20 17:14 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *119 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 17:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *123 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 17:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *120 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *03/31/20 17:14* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **2.0** | **0.90** | **10** | **ug/L** | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 00:56 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *71.4 %* | *27-119* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *51.0 %* | *7-85* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *76.8 %* | *15-314* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *102 %* | *36-141* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *31.2 %* | *1-65* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *101 %* | *4-168* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 00:56* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| **Di-n-butyl phthalate** | **2.2** | **0.90** | **10** | **ug/L** | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC04712 | 03/26/20 08:00 | 04/07/20 01:32 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *89.5 %* | *27-119* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *2.25 %* | *7-85* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *88.4 %* | *15-314* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *92.6 %* | *36-141* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *1.25 %* | *1-65* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *23.0 %* | *4-168* | | | *AC04712* | *03/26/20 08:00* | *04/07/20 01:32* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/06/20 22:31 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *93.6 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *103 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *66.3 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 22:31* | *EPA 625.1* | *NBH* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/06/20 23:05 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/06/20 23:05 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *81.7 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *92.5 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *63.1 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/06/20 23:05* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1s (20C2864-01) Water Sampled: 03/23/20 13:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 02:58 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *69.8 %* | *24-119* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:58* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *51.2 %* | *15-314* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:58* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *77.1 %* | *37-139* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 02:58* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03389 | 03/26/20 08:00 | 04/10/20 03:35 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-1d (20C2864-02) Water Sampled: 03/23/20 12:00 Received: 03/23/20 21:35** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *80.2 %* | *24-119* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 03:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *95.8 %* | *15-314* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 03:35* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *96.3 %* | *37-139* | | | *AD03389* | *03/26/20 08:00* | *04/10/20 03:35* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04793 - General Prep** | | | | | | | | | | | |
| **Blank (AC04793-BLK1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04793-BS1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AC04793-DUP1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04793-MS1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.22 | 0.30 | 1.0 | ug/L | 10.0 | ND | 92.2 | 90-110 | | | |
| **Matrix Spike (AC04793-MS2)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | ND | 98.0 | 90-110 | | | |
| **Matrix Spike Dup (AC04793-MSD1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.19 | 0.30 | 1.0 | ug/L | 10.0 | ND | 91.9 | 90-110 | 0.358 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AC04651-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04651-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.6 | 0.050 | 0.10 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Cadmium | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead | 18.4 | 0.060 | 0.25 | ug/L | 20.0 | | 92.0 | 85-115 | | | |
| Nickel | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Selenium | 20.8 | 0.30 | 2.0 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Silver | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Thallium | 18.6 | 0.050 | 0.10 | ug/L | 20.0 | | 93.1 | 85-115 | | | |
| Zinc | 104 | 4.0 | 5.0 | ug/L | 100 | | 104 | 85-115 | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | ND | 0.80 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic | 2.22 | 1.6 | 2.0 | ug/L | | 2.11 | | | 5.08 | 20 | |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 2.40 | 1.6 | 2.0 | ug/L | | 2.45 | | | 2.05 | 20 | |
| Lead | ND | 0.24 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Nickel | 3.36 | 1.2 | 2.0 | ug/L | | 3.23 | | | 3.89 | 20 | |
| Selenium | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AC04651-DUP1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Silver | ND | 0.050 | 0.10 | ug/L | | 0.0500 | | | 200 | 20 | U |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 41.7 | 16 | 20 | ug/L | | 41.6 | | | 0.327 | 20 | |
| **Matrix Spike (AC04651-MS1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 21.2 | 0.80 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Arsenic | 23.5 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 107 | 70-130 | | | |
| Beryllium | 22.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 112 | 70-130 | | | |
| Cadmium | 20.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 18.7 | 2.0 | 2.0 | ug/L | 20.0 | ND | 93.5 | 70-130 | | | |
| Copper | 24.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | | | |
| Lead | 18.4 | 0.24 | 1.0 | ug/L | 20.0 | ND | 91.8 | 70-130 | | | |
| Nickel | 22.4 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 95.7 | 70-130 | | | |
| Selenium | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 97.7 | 70-130 | | | |
| Thallium | 18.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 93.7 | 70-130 | | | |
| Zinc | 143 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | | | |
| **Matrix Spike (AC04651-MS2)** | | **Source: 20C2440-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.1 | 0.80 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Arsenic | 21.5 | 1.6 | 2.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Beryllium | 21.1 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Cadmium | 20.0 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.8 | 70-130 | | | |
| Chromium | 20.2 | 2.0 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Copper | 23.0 | 1.6 | 2.0 | ug/L | 20.0 | 2.32 | 103 | 70-130 | | | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Nickel | 20.9 | 1.2 | 2.0 | ug/L | 20.0 | 2.15 | 93.6 | 70-130 | | | |
| Selenium | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | 0.663 | 100 | 70-130 | | | |
| Silver | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Thallium | 18.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 92.0 | 70-130 | | | |
| Zinc | 107 | 16 | 20 | ug/L | 100 | ND | 107 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04651 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04651-MSD1)** | | **Source: 20C3166-02** | | | Prepared: 03/26/20 Analyzed: 03/31/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.56 | 20 | |
| Arsenic | 23.2 | 1.6 | 2.0 | ug/L | 20.0 | 2.11 | 105 | 70-130 | 1.37 | 20 | |
| Beryllium | 21.9 | 0.20 | 0.40 | ug/L | 20.0 | ND | 110 | 70-130 | 2.14 | 20 | |
| Cadmium | 19.9 | 0.060 | 0.10 | ug/L | 20.0 | ND | 99.3 | 70-130 | 3.21 | 20 | |
| Chromium | 19.4 | 2.0 | 2.0 | ug/L | 20.0 | ND | 96.8 | 70-130 | 3.53 | 20 | |
| Copper | 24.1 | 1.6 | 2.0 | ug/L | 20.0 | 2.45 | 108 | 70-130 | 0.166 | 20 | |
| Lead | 18.1 | 0.24 | 1.0 | ug/L | 20.0 | ND | 90.7 | 70-130 | 1.19 | 20 | |
| Nickel | 22.5 | 1.2 | 2.0 | ug/L | 20.0 | 3.23 | 96.4 | 70-130 | 0.607 | 20 | |
| Selenium | 20.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 100 | 70-130 | 0.781 | 20 | |
| Silver | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | 0.0500 | 95.5 | 70-130 | 2.20 | 20 | |
| Thallium | 18.3 | 0.20 | 0.40 | ug/L | 20.0 | ND | 91.7 | 70-130 | 2.12 | 20 | |
| Zinc | 142 | 16 | 20 | ug/L | 100 | 41.6 | 101 | 70-130 | 0.651 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04990 - General Prep** | | | | | | | | | | | |
| **Blank (AC04990-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04990-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC04990-DUP1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04990-MS1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04990-MSD1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 2.87 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04709-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0644 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04709-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.7 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic, dissolved | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Beryllium, dissolved | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Cadmium, dissolved | 20.1 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | | 98.8 | 85-115 | | | |
| Copper, dissolved | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead, dissolved | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 19.1 | 0.30 | 0.50 | ug/L | 20.0 | | 95.7 | 85-115 | | | |
| Selenium, dissolved | 19.0 | 0.30 | 2.0 | ug/L | 20.0 | | 95.2 | 85-115 | | | |
| Silver, dissolved | 19.5 | 0.050 | 0.10 | ug/L | 20.0 | | 97.3 | 85-115 | | | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 100 | 4.0 | 5.0 | ug/L | 100 | | 100 | 85-115 | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Antimony, dissolved | ND | 0.40 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.52 | 4.0 | 5.0 | ug/L | | 4.63 | | | 2.41 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | 0.776 | | | 200 | 20 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Silver, dissolved | 0.195 | 0.10 | 0.20 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC04709-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 25.0 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 102 | 70-130 | | | |
| Beryllium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.0 | 70-130 | | | |
| Cadmium, dissolved | 19.4 | 0.12 | 0.20 | ug/L | 20.0 | ND | 97.2 | 70-130 | | | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.5 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 20.7 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 99.5 | 70-130 | | | |
| Nickel, dissolved | 19.2 | 3.0 | 5.0 | ug/L | 20.0 | ND | 96.1 | 70-130 | | | |
| Selenium, dissolved | 18.8 | 0.60 | 4.0 | ug/L | 20.0 | ND | 94.2 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Thallium, dissolved | 20.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike Dup (AC04709-MSD1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | 0.0761 | 20 | |
| Arsenic, dissolved | 24.6 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 100 | 70-130 | 1.44 | 20 | |
| Beryllium, dissolved | 19.9 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.4 | 70-130 | 0.349 | 20 | |
| Cadmium, dissolved | 19.6 | 0.12 | 0.20 | ug/L | 20.0 | ND | 98.0 | 70-130 | 0.813 | 20 | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | 0.195 | 20 | |
| Copper, dissolved | 21.0 | 4.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.41 | 20 | |
| Lead, dissolved | 20.3 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 97.6 | 70-130 | 1.86 | 20 | |
| Nickel, dissolved | 18.9 | 3.0 | 5.0 | ug/L | 20.0 | ND | 94.6 | 70-130 | 1.52 | 20 | |
| Selenium, dissolved | 19.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 96.3 | 70-130 | 2.20 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 92.9 | 70-130 | 2.41 | 20 | |
| Thallium, dissolved | 20.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 3.21 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.549 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03331 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03331-BLK1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03331-BS1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 4.67 | 0.200 | 0.500 | ng/l | 5.00 | | 93.4 | 77-123 | | | |
| **Matrix Spike (AD03331-MS1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 29.0 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 88.0 | 71-125 | | | |
| **Matrix Spike (AD03331-MS2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 27.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 105 | 71-125 | | | |
| **Matrix Spike Dup (AD03331-MSD1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 28.8 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 87.2 | 71-125 | 0.726 | 24 | |
| **Matrix Spike Dup (AD03331-MSD2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 26.0 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 99.1 | 71-125 | 5.13 | 24 | |
| **Reference (AD03331-SRM1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 46.3 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Reference (AD03694-SRM1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 46.7 | 0.200 | 0.500 | ng/l | 50.0 | | 93.3 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03028 - General Preparation** | | | | | | | | | | | |
| **LCS (AD03028-BS1)** | | | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.191 | 0.0020 | 0.0030 | mg/L | 0.200 | | 95.6 | 85-115 | | | |
| **Matrix Spike (AD03028-MS2)** | | **Source: 20C2880-01** | | | Prepared & Analyzed: 04/01/20 | | | | | | |
| Cyanide (total) | 0.220 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04713 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04713-BLK1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *60.4* | | | *ug/L* | *57.4* | | *105* | *39-120* | | | |
| **LCS (AC04713-BS1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | 1940 | 50 | 250 | ug/L | 2100 | | 92.5 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *55.5* | | | *ug/L* | *57.4* | | *96.7* | *39-120* | | | |
| **LCS (AC04713-BS2)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Motor Oil | 1470 | 100 | 250 | ug/L | 2010 | | 73.3 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *54.5* | | | *ug/L* | *57.4* | | *95.0* | *39-120* | | | |
| **LCS Dup (AC04713-BSD1)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Diesel | 1870 | 50 | 250 | ug/L | 2100 | | 89.2 | 61-120 | 3.61 | 25 | |
| *Surrogate: Tetratetracontane* | *53.2* | | | *ug/L* | *57.4* | | *92.7* | *39-120* | | | |
| **LCS Dup (AC04713-BSD2)** | | | | | Prepared: 03/25/20 Analyzed: 03/26/20 | | | | | | |
| TPH as Motor Oil | 1480 | 100 | 250 | ug/L | 2010 | | 73.7 | 71-125 | 0.558 | 25 | |
| *Surrogate: Tetratetracontane* | *63.7* | | | *ug/L* | *57.4* | | *111* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05006 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05006-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *76-129* | | | |
| **LCS (AC05006-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 152 | 50 | 50 | ug/L | 200 | | 75.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **LCS Dup (AC05006-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 173 | 50 | 50 | ug/L | 200 | | 86.5 | 67-132 | 13.2 | 25 | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *76-129* | | | |
| **Matrix Spike (AC05006-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 174 | 50 | 50 | ug/L | 200 | ND | 87.2 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC05006-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 159 | 50 | 50 | ug/L | 200 | ND | 79.5 | 37-156 | 9.24 | 25 | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *97.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 53.1 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 47.0 | 2.0 | 5.0 | ug/L | 50.0 | | 94.1 | 60-140 | 12.0 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 56.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 112 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 54.7 | 2.0 | 5.0 | ug/L | 50.0 | ND | 109 | 40-160 | 2.35 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.4 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.8 | 3-225 | 0.369 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 105 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 102 | 3-305 | 3.25 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05007-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05007-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.9 | 0.30 | 0.30 | ug/L | 20.0 | | 99.6 | 65-135 | | | |
| Bromoform | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Carbon tetrachloride | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | | | |
| Chlorobenzene | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.0 | 65-135 | | | |
| Dibromochloromethane | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-135 | | | |
| Chloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.6 | 40-160 | | | |
| Chloroform | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-135 | | | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | | | |
| 1,1-Dichloroethene | 18.0 | 0.30 | 0.50 | ug/L | 20.0 | | 90.1 | 50-150 | | | |
| 1,2-Dichloropropane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | | 90.2 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.0 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 50-150 | | | |
| Ethylbenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 60-140 | | | |
| Bromomethane | 16.4 | 0.40 | 0.50 | ug/L | 20.0 | | 81.8 | 15-185 | | | |
| Chloromethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 2-205 | | | |
| Methylene chloride | 19.2 | 0.50 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.5 | 0.30 | 0.50 | ug/L | 20.0 | | 97.3 | 60-140 | | | |
| Tetrachloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| Toluene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | | | |
| Trichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.7 | 65-135 | | | |
| Vinyl chloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 65-135 | | | |
| 1,3-Dichlorobenzene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.5 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC05007-BSD1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 120 | 60-140 | 0.672 | 25 | |
| Benzene | 20.9 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 65-135 | 4.66 | 25 | |
| Bromoform | 22.9 | 0.30 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | 6.62 | 25 | |
| Carbon tetrachloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 4.66 | 25 | |
| Chlorobenzene | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 3.26 | 25 | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | | 121 | 70-135 | 7.17 | 25 | |
| Chloroethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.6 | 40-160 | 2.37 | 25 | |
| Chloroform | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-135 | 4.04 | 25 | |
| Bromodichloromethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | 3.81 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.88 | 25 | |
| 1,2-Dichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.10 | 25 | |
| 1,1-Dichloroethene | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | | 96.7 | 50-150 | 7.07 | 25 | |
| 1,2-Dichloropropane | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 35-165 | 2.90 | 25 | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.8 | 25-175 | 4.17 | 25 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 50-150 | 6.56 | 25 | |
| Ethylbenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 5.44 | 25 | |
| Bromomethane | 18.2 | 0.40 | 0.50 | ug/L | 20.0 | | 91.2 | 15-185 | 10.8 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 2-205 | 4.98 | 25 | |
| Methylene chloride | 19.7 | 0.50 | 0.50 | ug/L | 20.0 | | 98.5 | 60-140 | 2.62 | 25 | |
| 1,1,2,2-Tetrachloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.57 | 25 | |
| Tetrachloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.68 | 25 | |
| Toluene | 21.6 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 70-130 | 5.52 | 25 | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | 3.41 | 25 | |
| 1,1,1-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 8.60 | 25 | |
| 1,1,2-Trichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 4.00 | 25 | |
| Trichloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 4.55 | 25 | |
| Vinyl chloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.6 | 5-195 | 3.16 | 25 | |
| 1,2-Dichlorobenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 65-135 | 3.81 | 25 | |
| 1,3-Dichlorobenzene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 4.04 | 25 | |
| 1,4-Dichlorobenzene | 20.1 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 0.150 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05007-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | | | |
| Benzene | 22.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 111 | 37-151 | | | |
| Bromoform | 21.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 45-169 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 70-140 | | | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 53-149 | | | |
| Chloroethane | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.6 | 14-230 | | | |
| Chloroform | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 51-138 | | | |
| Bromodichloromethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 35-155 | | | |
| 1,1-Dichloroethane | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 59-155 | | | |
| 1,2-Dichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 49-155 | | | |
| 1,1-Dichloroethene | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.7 | 2-210 | | | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 91.8 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.2 | 17-183 | | | |
| Ethylbenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 37-162 | | | |
| Bromomethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 2-242 | | | |
| Chloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 2-273 | | | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.2 | 46-157 | | | |
| Tetrachloroethene | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | | | |
| Toluene | 22.6 | 0.30 | 0.30 | ug/L | 20.0 | ND | 113 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 52-150 | | | |
| Trichloroethene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 70-157 | | | |
| Vinyl chloride | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 2-251 | | | |
| 1,2-Dichlorobenzene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.0 | 0.10 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05007-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 113 | 40-160 | 3.77 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 0.898 | 61 | |
| Bromoform | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 45-169 | 7.64 | 42 | |
| Carbon tetrachloride | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | 5.44 | 41 | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0488 | 53 | |
| Dibromochloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 53-149 | 2.77 | 50 | |
| Chloroethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 14-230 | 4.35 | 78 | |
| Chloroform | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 51-138 | 1.10 | 54 | |
| Bromodichloromethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 35-155 | 4.65 | 56 | |
| 1,1-Dichloroethane | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | 1.94 | 40 | |
| 1,2-Dichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 49-155 | 2.11 | 49 | |
| 1,1-Dichloroethene | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 2-234 | 1.37 | 32 | |
| 1,2-Dichloropropane | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.4 | 2-210 | 3.87 | 55 | |
| cis-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.0 | 2-227 | 5.56 | 58 | |
| trans-1,3-Dichloropropene | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 17-183 | 3.44 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 4.37 | 63 | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-242 | 7.58 | 61 | |
| Chloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 2-273 | 0.502 | 60 | |
| Methylene chloride | 20.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 103 | 2-221 | 3.01 | 28 | |
| 1,1,2,2-Tetrachloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 46-157 | 2.05 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 0.446 | 39 | |
| Toluene | 23.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 1.97 | 41 | |
| trans-1,2-Dichloroethene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | 0.655 | 45 | |
| 1,1,1-Trichloroethane | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 52-162 | 1.41 | 36 | |
| 1,1,2-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-150 | 0.599 | 45 | |
| Trichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 70-157 | 1.94 | 48 | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | 6.33 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 1.88 | 57 | |
| 1,3-Dichlorobenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 59-156 | 3.18 | 43 | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | 2.22 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04712-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 2.45 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04712-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *19.2* | | | *ug/L* | *40.0* | | *48.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *18.6* | | | *ug/L* | *40.0* | | *46.4* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *31.0* | | | *ug/L* | *40.0* | | *77.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.9* | | | *ug/L* | *40.0* | | *89.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *15.1* | | | *ug/L* | *40.0* | | *37.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *29.6* | | | *ug/L* | *40.0* | | *73.9* | *4-168* | | | |
| **LCS (AC04712-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 22.0 | 0.70 | 5.0 | ug/L | 40.0 | | 54.9 | 36-120 | | | |
| 2,4-Dichlorophenol | 24.5 | 0.70 | 5.0 | ug/L | 40.0 | | 61.4 | 53-122 | | | |
| 2,4-Dimethylphenol | 39.6 | 1.0 | 2.0 | ug/L | 50.0 | | 79.3 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 26.4 | 3.0 | 5.0 | ug/L | 40.0 | | 66.0 | 53-130 | | | |
| 2,4-Dinitrophenol | 21.9 | 5.0 | 5.0 | ug/L | 50.0 | | 43.8 | 10-173 | | | |
| 2-Nitrophenol | 18.6 | 0.90 | 10 | ug/L | 40.0 | | 46.5 | 45-167 | | | |
| 4-Nitrophenol | 10.5 | 3.0 | 10 | ug/L | 40.0 | | 26.4 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 35.3 | 1.0 | 1.0 | ug/L | 40.0 | | 88.3 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 31.3 | 0.60 | 5.0 | ug/L | 40.0 | | 78.3 | 36-102 | | | |
| Pentachlorophenol | 30.1 | 4.0 | 5.0 | ug/L | 40.0 | | 75.2 | 38-152 | | | |
| Phenol | 15.2 | 0.50 | 1.0 | ug/L | 40.0 | | 38.0 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 23.5 | 0.70 | 10 | ug/L | 40.0 | | 58.6 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 32.9 | 0.90 | 5.0 | ug/L | 40.0 | | 82.3 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 29.8 | 0.90 | 1.0 | ug/L | 40.0 | | 74.5 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.3 | 1.0 | 2.0 | ug/L | 40.0 | | 73.3 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 39.5 | 3.0 | 5.0 | ug/L | 40.0 | | 98.7 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 31.6 | 1.0 | 5.0 | ug/L | 40.0 | | 78.9 | 65-120 | | | |
| Butyl benzyl phthalate | 17.0 | 0.60 | 10 | ug/L | 40.0 | | 42.6 | 2-140 | | | |
| 2-Chloronaphthalene | 26.8 | 0.60 | 10 | ug/L | 40.0 | | 67.1 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 29.7 | 0.90 | 5.0 | ug/L | 40.0 | | 74.2 | 38-145 | | | |
| 1,2-Dichlorobenzene | 24.7 | 0.60 | 2.0 | ug/L | 40.0 | | 61.8 | 33-93 | | | |
| 1,4-Dichlorobenzene | 22.7 | 0.60 | 1.0 | ug/L | 40.0 | | 56.8 | 32-91 | | | |
| 1,3-Dichlorobenzene | 23.0 | 0.60 | 1.0 | ug/L | 40.0 | | 57.5 | 31-92 | | | |
| Diethyl phthalate | 20.7 | 0.30 | 2.0 | ug/L | 40.0 | | 51.8 | 2-120 | | | |
| Dimethyl phthalate | 9.36 | 0.80 | 2.0 | ug/L | 40.0 | | 23.4 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC04712-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Di-n-butyl phthalate | 35.7 | 0.90 | 10 | ug/L | 40.0 | | 89.3 | 8-120 | | | |
| 2,4-Dinitrotoluene | 30.6 | 0.80 | 5.0 | ug/L | 40.0 | | 76.5 | 48-127 | | | |
| 2,6-Dinitrotoluene | 33.3 | 0.80 | 5.0 | ug/L | 40.0 | | 83.2 | 68-137 | | | |
| Di-n-octyl phthalate | 13.7 | 0.60 | 10 | ug/L | 40.0 | | 34.2 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 33.9 | 0.60 | 1.0 | ug/L | 40.0 | | 84.8 | 52-115 | | | |
| Hexachlorobenzene | 32.2 | 0.90 | 1.0 | ug/L | 40.0 | | 80.6 | 8-142 | | | |
| Hexachlorobutadiene | 24.1 | 0.80 | 1.0 | ug/L | 40.0 | | 60.3 | 38-120 | | | |
| Hexachlorocyclopentadiene | 12.8 | 4.0 | 5.0 | ug/L | 40.0 | | 32.1 | 16-93 | | | |
| Hexachloroethane | 23.5 | 0.60 | 1.0 | ug/L | 40.0 | | 58.8 | 55-120 | | | |
| Isophorone | 34.9 | 0.30 | 1.0 | ug/L | 40.0 | | 87.3 | 47-180 | | | |
| Nitrobenzene | 28.0 | 0.90 | 1.0 | ug/L | 40.0 | | 70.0 | 54-158 | | | |
| N-Nitrosodimethylamine | 24.2 | 0.30 | 5.0 | ug/L | 40.0 | | 60.5 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 34.3 | 0.80 | 5.0 | ug/L | 40.0 | | 85.7 | 14-198 | | | |
| N-Nitrosodiphenylamine | 33.8 | 1.0 | 1.0 | ug/L | 40.0 | | 84.5 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 23.1 | 0.60 | 5.0 | ug/L | 40.0 | | 57.8 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.2* | | | *ug/L* | *40.0* | | *85.5* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *18.2* | | | *ug/L* | *40.0* | | *45.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.6* | | | *ug/L* | *40.0* | | *84.1* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *35.4* | | | *ug/L* | *40.0* | | *88.4* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.0* | | | *ug/L* | *40.0* | | *40.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *37.0* | | | *ug/L* | *40.0* | | *92.5* | *4-168* | | | |
| **Matrix Spike (AC04712-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 31.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 78.9 | 23-134 | | | |
| 2,4-Dichlorophenol | 32.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 81.1 | 39-135 | | | |
| 2,4-Dimethylphenol | 7.81 | 1.0 | 2.0 | ug/L | 50.0 | ND | 15.6 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 11.7 | 3.0 | 5.0 | ug/L | 40.0 | ND | 29.3 | 7-181 | | | |
| 2,4-Dinitrophenol | 6.11 | 5.0 | 5.0 | ug/L | 50.0 | ND | 12.2 | 10-191 | | | |
| 2-Nitrophenol | 31.6 | 0.90 | 10 | ug/L | 40.0 | ND | 79.0 | 29-182 | | | |
| 4-Nitrophenol | 9.51 | 3.0 | 10 | ug/L | 40.0 | ND | 23.8 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 31.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 78.8 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 28.3 | 0.60 | 5.0 | ug/L | 40.0 | ND | 70.8 | 9-124 | | | |
| Pentachlorophenol | 5.95 | 4.0 | 5.0 | ug/L | 40.0 | ND | 14.9 | 14-176 | | | |
| Phenol | 17.2 | 0.50 | 1.0 | ug/L | 40.0 | ND | 43.1 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 24.3 | 0.70 | 10 | ug/L | 40.0 | ND | 60.7 | 37-144 | | | |
| Bis(2-chloroethoxy)methane | 34.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 87.2 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 34.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 87.3 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC04712-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 37.2 | 1.0 | 2.0 | ug/L | 40.0 | ND | 93.1 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 26.2 | 3.0 | 5.0 | ug/L | 40.0 | ND | 65.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 30.3 | 1.0 | 5.0 | ug/L | 40.0 | ND | 75.8 | 53-127 | | | |
| Butyl benzyl phthalate | 35.6 | 0.60 | 10 | ug/L | 40.0 | ND | 89.0 | 2-152 | | | |
| 2-Chloronaphthalene | 31.1 | 0.60 | 10 | ug/L | 40.0 | ND | 77.7 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 28.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 71.0 | 25-158 | | | |
| 1,3-Dichlorobenzene | 24.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 60.0 | 1-106 | | | |
| 1,2-Dichlorobenzene | 26.8 | 0.60 | 2.0 | ug/L | 40.0 | ND | 67.1 | 7-104 | | | |
| 1,4-Dichlorobenzene | 25.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.7 | 3-105 | | | |
| Diethyl phthalate | 31.7 | 0.30 | 2.0 | ug/L | 40.0 | ND | 79.2 | 2-120 | | | |
| Dimethyl phthalate | 26.0 | 0.80 | 2.0 | ug/L | 40.0 | ND | 64.9 | 2-120 | | | |
| Di-n-butyl phthalate | 55.6 | 0.90 | 10 | ug/L | 40.0 | 1.70 | 135 | 1-120 | | | QM-05 |
| 2,4-Dinitrotoluene | 35.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 89.1 | 39-139 | | | |
| 2,6-Dinitrotoluene | 39.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 97.6 | 50-158 | | | |
| Di-n-octyl phthalate | 37.7 | 0.60 | 10 | ug/L | 40.0 | ND | 94.2 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 31.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 79.5 | 39-116 | | | |
| Hexachlorobenzene | 28.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 71.8 | 2-152 | | | |
| Hexachlorobutadiene | 25.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 64.3 | 24-120 | | | |
| Hexachlorocyclopentadiene | 19.7 | 4.0 | 5.0 | ug/L | 40.0 | ND | 49.2 | 10-93 | | | |
| Hexachloroethane | 27.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 68.4 | 40-120 | | | |
| Isophorone | 35.9 | 0.30 | 1.0 | ug/L | 40.0 | ND | 89.6 | 21-196 | | | |
| Nitrobenzene | 30.4 | 0.90 | 1.0 | ug/L | 40.0 | ND | 76.1 | 35-180 | | | |
| N-Nitrosodimethylamine | 13.4 | 0.30 | 5.0 | ug/L | 40.0 | ND | 33.4 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 40.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 102 | 2-230 | | | |
| N-Nitrosodiphenylamine | 34.3 | 1.0 | 1.0 | ug/L | 40.0 | ND | 85.8 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 24.6 | 0.60 | 5.0 | ug/L | 40.0 | ND | 61.5 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.6* | | | *ug/L* | *40.0* | | *94.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *15.6* | | | *ug/L* | *40.0* | | *39.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.6* | | | *ug/L* | *40.0* | | *84.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *24.7* | | | *ug/L* | *40.0* | | *61.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *16.7* | | | *ug/L* | *40.0* | | *41.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *24.7* | | | *ug/L* | *40.0* | | *61.8* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04712-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| 2-Chlorophenol | 29.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.0 | 23-134 | 7.87 | 61 | |
| 2,4-Dichlorophenol | 29.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 73.4 | 39-135 | 9.97 | 50 | |
| 2,4-Dimethylphenol | 8.96 | 1.0 | 2.0 | ug/L | 50.0 | ND | 17.9 | 32-120 | 13.7 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 11.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 29.0 | 7-181 | 1.12 | 203 | |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 50.0 | ND | | 10-191 | 200 | 132 | QM-05, QM-08, U |
| 2-Nitrophenol | 31.3 | 0.90 | 10 | ug/L | 40.0 | ND | 78.2 | 29-182 | 1.08 | 55 | |
| 4-Nitrophenol | 5.39 | 3.0 | 10 | ug/L | 40.0 | ND | 13.5 | 7-132 | 55.3 | 131 | J |
| 4-Chloro-3-methylphenol | 27.2 | 1.0 | 1.0 | ug/L | 40.0 | ND | 68.0 | 22-147 | 14.8 | 73 | |
| 2-Methylphenol (o-cresol) | 25.1 | 0.60 | 5.0 | ug/L | 40.0 | ND | 62.6 | 9-124 | 12.2 | 28 | |
| Pentachlorophenol | 5.48 | 4.0 | 5.0 | ug/L | 40.0 | ND | 13.7 | 14-176 | 8.22 | 86 | QM-05 |
| Phenol | 16.0 | 0.50 | 1.0 | ug/L | 40.0 | ND | 40.1 | 5-120 | 7.22 | 64 | |
| 2,4,6-Trichlorophenol | 16.2 | 0.70 | 10 | ug/L | 40.0 | ND | 40.6 | 37-144 | 39.7 | 58 | |
| Bis(2-chloroethoxy)methane | 34.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 84.9 | 33-184 | 2.76 | 54 | |
| Bis(2-chloroethyl)ether | 34.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 86.2 | 12-158 | 1.27 | 108 | |
| Bis(2-chloroisopropyl)ether | 34.5 | 1.0 | 2.0 | ug/L | 40.0 | ND | 86.2 | 36-166 | 7.75 | 76 | |
| Bis(2-ethylhexyl)phthalate | 17.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 44.5 | 8-158 | 38.1 | 82 | |
| 4-Bromophenyl phenyl ether | 27.5 | 1.0 | 5.0 | ug/L | 40.0 | ND | 68.7 | 53-127 | 9.79 | 43 | |
| Butyl benzyl phthalate | 24.8 | 0.60 | 10 | ug/L | 40.0 | ND | 62.0 | 2-152 | 35.8 | 60 | |
| 2-Chloronaphthalene | 21.1 | 0.60 | 10 | ug/L | 40.0 | ND | 52.7 | 60-120 | 38.4 | 24 | QM-05, QM-08 |
| 4-Chlorophenyl phenyl ether | 19.1 | 0.90 | 5.0 | ug/L | 40.0 | ND | 47.8 | 25-158 | 39.0 | 61 | |
| 1,2-Dichlorobenzene | 28.0 | 0.60 | 2.0 | ug/L | 40.0 | ND | 70.1 | 7-104 | 4.37 | 41 | |
| 1,3-Dichlorobenzene | 25.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.4 | 1-106 | 5.55 | 41 | |
| 1,4-Dichlorobenzene | 25.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 63.9 | 3-105 | 0.313 | 42 | |
| Diethyl phthalate | 19.0 | 0.30 | 2.0 | ug/L | 40.0 | ND | 47.4 | 2-120 | 50.3 | 100 | |
| Dimethyl phthalate | 14.9 | 0.80 | 2.0 | ug/L | 40.0 | ND | 37.3 | 2-120 | 53.9 | 183 | |
| Di-n-butyl phthalate | 41.4 | 0.90 | 10 | ug/L | 40.0 | 1.70 | 99.4 | 1-120 | 29.2 | 47 | |
| 2,4-Dinitrotoluene | 22.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 55.3 | 39-139 | 46.9 | 42 | QM-08 |
| 2,6-Dinitrotoluene | 24.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 59.9 | 50-158 | 47.9 | 48 | |
| Di-n-octyl phthalate | 24.3 | 0.60 | 10 | ug/L | 40.0 | ND | 60.7 | 4-146 | 43.2 | 69 | |
| 1,2-Diphenylhydrazine | 28.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 70.0 | 39-116 | 12.8 | 25 | |
| Hexachlorobenzene | 25.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 63.8 | 2-152 | 11.8 | 55 | |
| Hexachlorobutadiene | 27.6 | 0.80 | 1.0 | ug/L | 40.0 | ND | 69.0 | 24-120 | 6.98 | 62 | |
| Hexachlorocyclopentadiene | 13.0 | 4.0 | 5.0 | ug/L | 40.0 | ND | 32.6 | 10-93 | 40.6 | 55 | |
| Hexachloroethane | 26.7 | 0.60 | 1.0 | ug/L | 40.0 | ND | 66.6 | 40-120 | 2.56 | 52 | |
| Isophorone | 35.0 | 0.30 | 1.0 | ug/L | 40.0 | ND | 87.6 | 21-196 | 2.34 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04712 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC04712-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/06/20 | | | | | | |
| Nitrobenzene | 32.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 80.4 | 35-180 | 5.50 | 62 | |
| N-Nitrosodimethylamine | 12.3 | 0.30 | 5.0 | ug/L | 40.0 | ND | 30.8 | 10-84 | 8.34 | 59 | |
| N-Nitrosodi-n-propylamine | 37.8 | 0.80 | 5.0 | ug/L | 40.0 | ND | 94.4 | 2-230 | 7.96 | 87 | |
| N-Nitrosodiphenylamine | 29.1 | 1.0 | 1.0 | ug/L | 40.0 | ND | 72.8 | 40-115 | 16.4 | 25 | |
| 1,2,4-Trichlorobenzene | 26.6 | 0.60 | 5.0 | ug/L | 40.0 | ND | 66.5 | 44-142 | 7.82 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *22.8* | | | *ug/L* | *40.0* | | *57.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *17.4* | | | *ug/L* | *40.0* | | *43.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.2* | | | *ug/L* | *40.0* | | *85.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *23.8* | | | *ug/L* | *40.0* | | *59.5* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *14.9* | | | *ug/L* | *40.0* | | *37.3* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *21.8* | | | *ug/L* | *40.0* | | *54.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04875 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04875-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *35.8* | | | *ug/L* | *40.0* | | *89.4* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.7* | | | *ug/L* | *40.0* | | *96.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.5* | | | *ug/L* | *40.0* | | *106* | *36-141* | | | |
| **LCS (AC04875-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 13.0 | 3.00 | 5.00 | ug/L | 79.4 | | 16.4 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 76.0 | 2.00 | 5.00 | ug/L | 79.4 | | 95.8 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *36.6* | | | *ug/L* | *40.0* | | *91.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.3* | | | *ug/L* | *40.0* | | *95.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| **Matrix Spike (AC04875-MS1)** | | **Source: 20C2864-01** | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 11.6 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.6 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 72.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 91.4 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.0* | | | *ug/L* | *40.0* | | *84.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.1* | | | *ug/L* | *40.0* | | *90.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *24.7* | | | *ug/L* | *40.0* | | *61.7* | *36-141* | | | |
| **Matrix Spike Dup (AC04875-MSD1)** | | **Source: 20C2864-01** | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 12.0 | 3.00 | 5.00 | ug/L | 79.4 | ND | 15.1 | 4-262 | 3.47 | 108 | |
| 3,3´-Dichlorobenzidine | 58.5 | 2.00 | 5.00 | ug/L | 79.4 | ND | 73.8 | 4-262 | 21.4 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.2* | | | *ug/L* | *40.0* | | *93.1* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.4* | | | *ug/L* | *40.0* | | *98.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.5* | | | *ug/L* | *40.0* | | *71.3* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03389-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *26.7* | | | *ug/L* | *40.0* | | *66.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *17.0* | | | *ug/L* | *40.0* | | *42.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.5* | | | *ug/L* | *40.0* | | *93.8* | *37-139* | | | |
| **LCS (AD03389-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | 30.2 | 0.20 | 0.20 | ug/L | 40.0 | | 75.6 | 60-132 | | | |
| Acenaphthylene | 29.2 | 0.20 | 0.20 | ug/L | 40.0 | | 73.0 | 54-126 | | | |
| Anthracene | 33.9 | 0.090 | 0.20 | ug/L | 40.0 | | 84.8 | 43-120 | | | |
| Benzo (a) anthracene | 32.4 | 0.20 | 0.20 | ug/L | 40.0 | | 81.0 | 42-133 | | | |
| Benzo (a) pyrene | 37.2 | 0.20 | 0.20 | ug/L | 40.0 | | 92.9 | 32-148 | | | |
| Benzo (b) fluoranthene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | | 92.3 | 42-140 | | | |
| Benzo (g,h,i) perylene | 48.8 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-195 | | | |
| Benzo (k) fluoranthene | 36.7 | 0.20 | 0.20 | ug/L | 40.0 | | 91.8 | 25-146 | | | |
| Chrysene | 33.6 | 0.20 | 0.20 | ug/L | 40.0 | | 84.0 | 44-140 | | | |
| Dibenz (a,h) anthracene | 48.9 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-200 | | | |
| Fluoranthene | 31.9 | 0.070 | 0.20 | ug/L | 40.0 | | 79.8 | 43-121 | | | |
| Fluorene | 41.6 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 45.3 | 0.030 | 0.20 | ug/L | 40.0 | | 113 | 2-151 | | | |
| Naphthalene | 22.1 | 0.090 | 0.20 | ug/L | 40.0 | | 55.2 | 36-120 | | | |
| Phenanthrene | 34.5 | 0.10 | 0.20 | ug/L | 40.0 | | 86.2 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03389-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Pyrene | 32.7 | 0.20 | 0.20 | ug/L | 40.0 | | 81.8 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *31.4* | | | *ug/L* | *40.0* | | *78.5* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.7* | | | *ug/L* | *40.0* | | *74.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *37-139* | | | |
| **Matrix Spike (AD03389-MS1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/09/20 | | | | | | |
| Acenaphthene | 31.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 77.6 | 47-145 | | | |
| Acenaphthylene | 33.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.8 | 33-145 | | | |
| Anthracene | 34.5 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.2 | 27-133 | | | |
| Benzo (a) anthracene | 27.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 68.1 | 33-143 | | | |
| Benzo (a) pyrene | 20.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 51.4 | 17-163 | | | |
| Benzo (b) fluoranthene | 22.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 55.8 | 24-159 | | | |
| Benzo (g,h,i) perylene | 20.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 51.6 | 2-219 | | | |
| Benzo (k) fluoranthene | 23.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 58.7 | 11-162 | | | |
| Chrysene | 28.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.7 | 17-168 | | | |
| Dibenz (a,h) anthracene | 22.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 56.0 | 2-227 | | | |
| Fluoranthene | 34.1 | 0.070 | 0.20 | ug/L | 40.0 | ND | 85.2 | 26-137 | | | |
| Fluorene | 36.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.2 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 21.1 | 0.030 | 0.20 | ug/L | 40.0 | ND | 52.8 | 2-171 | | | |
| Naphthalene | 25.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 64.2 | 21-133 | | | |
| Phenanthrene | 34.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 87.0 | 54-120 | | | |
| Pyrene | 37.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 93.4 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.1* | | | *ug/L* | *40.0* | | *80.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.6* | | | *ug/L* | *40.0* | | *93.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *31.5* | | | *ug/L* | *40.0* | | *78.8* | *37-139* | | | |
| **Matrix Spike Dup (AD03389-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | 31.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.0 | 47-145 | 1.88 | 48 | |
| Acenaphthylene | 35.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 88.1 | 33-145 | 5.06 | 74 | |
| Anthracene | 34.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.0 | 27-133 | 0.174 | 66 | |
| Benzo (a) anthracene | 28.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.3 | 33-143 | 3.14 | 53 | |
| Benzo (a) pyrene | 21.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 54.7 | 17-163 | 6.08 | 72 | |
| Benzo (b) fluoranthene | 23.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 59.6 | 24-159 | 6.54 | 71 | |
| Benzo (g,h,i) perylene | 26.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 66.6 | 2-219 | 25.2 | 97 | |
| Benzo (k) fluoranthene | 24.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 60.1 | 11-162 | 2.36 | 63 | |
| Chrysene | 27.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 69.6 | 17-168 | 2.97 | 87 | |
| Dibenz (a,h) anthracene | 28.8 | 0.10 | 0.20 | ug/L | 40.0 | ND | 72.1 | 2-227 | 25.3 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/14/20 14:37 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03389 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03389-MSD1)** | | **Source: 20C2614-01** | | | Prepared: 03/26/20 Analyzed: 04/10/20 | | | | | | |
| Fluoranthene | 34.0 | 0.070 | 0.20 | ug/L | 40.0 | ND | 85.0 | 26-137 | 0.235 | 66 | |
| Fluorene | 39.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 98.1 | 59-121 | 6.17 | 38 | |
| Indeno (1,2,3-cd) pyrene | 26.4 | 0.030 | 0.20 | ug/L | 40.0 | ND | 66.0 | 2-171 | 22.2 | 99 | |
| Naphthalene | 24.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 60.0 | 21-133 | 6.64 | 65 | |
| Phenanthrene | 34.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 85.8 | 54-120 | 1.36 | 39 | |
| Pyrene | 33.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 83.4 | 52-120 | 11.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.7* | | | *ug/L* | *40.0* | | *81.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.5* | | | *ug/L* | *40.0* | | *68.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.2* | | | *ug/L* | *40.0* | | *70.6* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/14/20 14:37 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C2864



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

2.8°C Ukiah

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter David C Walt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| WMSA-DMW-1s | 3-23-2020 | 1300 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | 3-23-2020 | 1200 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-23-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TAT: 24 hr ○ 48 hr ○ Lab Approval Required ○ 1 wk ○ 2 wk (standard) ⊘ — Lab Approval Required For Rush

| | | | |
|---|---|---|---|
| Relinquished by: David C Walt | Received by: | Date: 3/23/20 | Time: 1615 |
| Relinquished by: | Received by: | Date: 3-23-20 | Time: 19:09 |
| Relinquished by: | Received by: | Date: 3-23-20 | Time: 21:35 |
| Relinquished by: | Received by: | Date: | Time: |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ( )

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**

**20C2864**

Printed: 3/24/2020 8:21:44AM

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

**Client:** Golder Associates - Sunnyvale
**Project Manager:** Robbie C. Phillips

**Project:** EMSA/WMSA Sampling
**Project Number:** Ground Water

Date Due: 04/07/20 15:00 (10 day TAT)
Received By: Pete L. Hathaway
Logged In By: Sean Foley
Date Received: 03/23/20 21:35
Date Logged In: 03/24/20 08:17

Samples Received at: 4.9 deg C
All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C2864-01 WMSA-DMW-1s [Water] Sampled 03/23/20 13:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 04/20/20 13:00 | | |
| **20C2864-01 WMSA-DMW-1s [Water] Sampled 03/23/20 13:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/20/20 13:00 | | |
| **20C2864-02 WMSA-DMW-1d [Water] Sampled 03/23/20 12:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 | BAL Metals | 04/20/20 12:00 | | |
| **20C2864-02 WMSA-DMW-1d [Water] Sampled 03/23/20 12:00 (GMT-08:00) Pac** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/20/20 12:00 | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By | 3-24-20 | | Received By | 3-24-20 14:18 |
| | Date | Time | | Date Time |
| Relinquished By | 3-24-20 | 17:54 | Received By | 3/24/20 1754 |
| | Date | Time | | Date Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

22 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C3138

Enclosed are the results of analyses for samples received by the laboratory on 03/24/20 20:44. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 13:22 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-3 | 20C3138-01 | Water | 03/24/20 12:40 | 03/24/20 20:44 |
| EMSA-DMW-4s | 20C3138-02 | Water | 03/24/20 10:30 | 03/24/20 20:44 |
| EMSA-DMW-4d | 20C3138-03 | Water | 03/24/20 11:30 | 03/24/20 20:44 |
| EMSA-DMW-5 | 20C3138-04 | Water | 03/24/20 13:50 | 03/24/20 20:44 |
| Blank - Ground Water | 20C3138-05 | Water | 03/24/20 00:00 | 03/24/20 20:44 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 04:07 | 03/28/20 04:07 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 04:25 | 03/28/20 04:25 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 04:44 | 03/28/20 04:44 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AC04793 | 03/28/20 05:02 | 03/28/20 05:02 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **14** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:52 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **Copper** | **13** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **18** | **3.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **3.5** | **0.60** | **4.0** | **ug/L** | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:52 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:52 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:13 | EPA 200.8 | MB | 1551 | R-01, U |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **5.5** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:59 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:59 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/07/20 23:59 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:20 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:28 | EPA 200.8 | MB | 1551 | R-01, U |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **4.3** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, J |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/08/20 00:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/07/20 23:36 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 18:39 | 03/30/20 18:39 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 18:58 | 03/30/20 18:58 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 19:16 | 03/30/20 19:16 | EPA 218.6 | LRN | 1551 | U |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 19:35 | 03/30/20 19:35 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **6.0** | **4.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **15** | **3.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | |
| **Selenium, dissolved** | **2.7** | **0.60** | **4.0** | **ug/L** | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:02 | EPA 200.8 | SMP | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:11 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **4.6** | **4.0** | **5.0** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 02:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Lead, dissolved** | **0.78** | **0.60** | **2.5** | **ug/L** | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, J |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 02:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 02:53 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:02 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:10 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC04709 | 03/26/20 10:30 | 04/02/20 03:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC04709 | 03/26/20 10:30 | 04/01/20 23:28 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Mercury** | **2.98** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 16:53 | EPA 1631E | AJC | 2728 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Mercury** | **0.976** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 17:01 | EPA 1631E | AJC | 2728 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Mercury** | **0.775** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 17:09 | EPA 1631E | AJC | 2728 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 17:17 | EPA 1631E | AJC | 2728 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD03694 | 04/09/20 18:00 | 04/10/20 19:09 | EPA 1631E | AJC | 2728 | R-01, U |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.348** | **0.200** | **0.500** | **ng/l** | 1 | AD03694 | 04/09/20 18:00 | 04/10/20 19:18 | EPA 1631E | AJC | 2728 | J |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Mercury, dissolved** | **0.239** | **0.200** | **0.500** | **ng/l** | 1 | AD04058 | 04/15/20 16:00 | 04/16/20 14:15 | EPA 1631E | AJC | 2728 | J |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | 1 | AD04058 | 04/15/20 16:00 | 04/16/20 14:40 | EPA 1631E | AJC | 2728 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **Cyanide (total)** | **0.0026** | **0.0020** | **0.0030** | **mg/L** | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:23 | 10-204-00-1X | EV | 1551 | J |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:24 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:26 | 10-204-00-1X | EV | 1551 | U |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:27 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 20:27 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 20:27 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *108 %* | *39-120* | | | *AC04960* | *03/30/20 07:06* | *04/02/20 20:27* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 21:01 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 21:01 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *103 %* | *39-120* | | | *AC04960* | *03/30/20 07:06* | *04/02/20 21:01* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 21:36 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 21:36 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *92.5 %* | *39-120* | | | *AC04960* | *03/30/20 07:06* | *04/02/20 21:36* | *8015DRO* | *NBH* | 1551 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| **TPH as Diesel** | **110** | **50** | **250** | **ug/L** | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 22:11 | 8015DRO | NBH | 1551 | J |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC04960 | 03/30/20 07:06 | 04/02/20 22:11 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *112 %* | *39-120* | | | *AC04960* | *03/30/20 07:06* | *04/02/20 22:11* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03039 | 04/01/20 08:30 | 04/01/20 09:23 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *99.1 %* | *76-129* | | | *AD03039* | *04/01/20 08:30* | *04/01/20 09:23* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03039 | 04/01/20 08:30 | 04/01/20 09:58 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.9 %* | *76-129* | | | *AD03039* | *04/01/20 08:30* | *04/01/20 09:58* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03039 | 04/01/20 08:30 | 04/01/20 10:32 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *101 %* | *76-129* | | | *AD03039* | *04/01/20 08:30* | *04/01/20 10:32* | *8260GRO* | *JV* | 1551 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03039 | 04/01/20 08:30 | 04/01/20 11:07 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *96.2 %* | *76-129* | | | *AD03039* | *04/01/20 08:30* | *04/01/20 11:07* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 20:55 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *98.2 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 21:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *99.8 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 22:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.9 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 22:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *108 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C3138-05) Water Sampled: 03/24/20 00:00 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 23:14 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 20:55 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *98.2 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 20:55* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 21:30 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *99.8 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *101 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 21:30* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 22:04 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *106 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *98.9 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:04* | *EPA 624.1* | *JV* | 1551 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 22:39 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *108 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 22:39* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C3138-05) Water Sampled: 03/24/20 00:00 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/26/20 23:14 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *102 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/26/20 23:14* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:23 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:23* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *117 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:23* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *116 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:23* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 09:58 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *115 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *113 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:58* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *116 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 09:58* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 10:32 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 10:32* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *107 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 10:32* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 10:32* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:07 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *113 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *117 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:07* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *112 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:07* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C3138-05) Water Sampled: 03/24/20 00:00 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 11:41 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *116 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *122 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:41* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *111 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 11:41* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water** | **Sampled: 03/24/20 12:40** | | **Received: 03/24/20 20:44** | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 11:38 | EPA 625.1 | NBH | 1551 | QM-15, U |
| *Surrogate: 2-Fluorobiphenyl* | | *63.8 %* | *27-119* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *6.18 %* | *7-85* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *66.2 %* | *15-314* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *81.9 %* | *36-141* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *4.20 %* | *1-65* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *29.0 %* | *4-168* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 11:38* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:14 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *73.5 %* | *27-119* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *55.2 %* | *7-85* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *75.6 %* | *15-314* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *70.7 %* | *36-141* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *33.9 %* | *1-65* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *94.8 %* | *4-168* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:14* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4d (20C3138-03) Water** | **Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 12:51 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *64.4 %* | *27-119* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *51.1 %* | *7-85* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *71.4 %* | *15-314* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *87.5 %* | *36-141* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *33.6 %* | *1-65* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *91.3 %* | *4-168* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 12:51* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-5 (20C3138-04) Water** | **Sampled: 03/24/20 13:50** | **Received: 03/24/20 20:44** | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-5 (20C3138-04) Water** | **Sampled: 03/24/20 13:50** | **Received: 03/24/20 20:44** | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05021 | 03/31/20 08:00 | 04/09/20 13:27 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *80.7 %* | *27-119* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *43.8 %* | *7-85* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *75.2 %* | *15-314* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *62.4 %* | *36-141* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *29.4 %* | *1-65* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *78.7 %* | *4-168* | | | *AC05021* | *03/31/20 08:00* | *04/09/20 13:27* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 01:20 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 01:20 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *88.6 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *95.5 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *78.1 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:20* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 01:54 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 01:54 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *84.6 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *93.6 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:54* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *85.0 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 01:54* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 02:28 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 02:28 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *90.4 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 02:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *97.7 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 02:28* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *95.8 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 02:28* | *EPA 625.1* | *NBH* | 1551 | |
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 03:01 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AC04875 | 03/30/20 08:00 | 04/07/20 03:01 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *82.6 %* | *27-119* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 03:01* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *91.2 %* | *15-314* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 03:01* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *93.5 %* | *36-141* | | | *AC04875* | *03/30/20 08:00* | *04/07/20 03:01* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-3 (20C3138-01) Water Sampled: 03/24/20 12:40 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | QM-15, U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 06:41 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *60.5 %* | *24-119* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 06:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *48.6 %* | *15-314* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 06:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *92.6 %* | *37-139* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 06:41* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:18 | EPA 625.1SIM | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-4s (20C3138-02) Water Sampled: 03/24/20 10:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | *62.4 %* | *24-119* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *75.2 %* | *15-314* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *69.3 %* | *37-139* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:18* | *EPA 625.1SIM* | *NBH* | 1551 | |
| **EMSA-DMW-4d (20C3138-03) Water Sampled: 03/24/20 11:30 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 07:56 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *80.0 %* | *24-119* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:56* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *92.5 %* | *15-314* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:56* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *75.5 %* | *37-139* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 07:56* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-5 (20C3138-04) Water Sampled: 03/24/20 13:50 Received: 03/24/20 20:44** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD03661 | 03/31/20 08:00 | 04/10/20 08:33 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *80.1 %* | *24-119* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 08:33* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *65.2 %* | *15-314* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 08:33* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *69.7 %* | *37-139* | | | *AD03661* | *03/31/20 08:00* | *04/10/20 08:33* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04793 - General Prep** | | | | | | | | | | | |
| **Blank (AC04793-BLK1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04793-BS1)** | | | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AC04793-DUP1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04793-MS1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.22 | 0.30 | 1.0 | ug/L | 10.0 | ND | 92.2 | 90-110 | | | |
| **Matrix Spike (AC04793-MS2)** | | **Source: 20C2614-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.80 | 0.30 | 1.0 | ug/L | 10.0 | ND | 98.0 | 90-110 | | | |
| **Matrix Spike Dup (AC04793-MSD1)** | | **Source: 20C2496-01** | | | Prepared & Analyzed: 03/27/20 | | | | | | |
| Chromium, hexavalent | 9.19 | 0.30 | 1.0 | ug/L | 10.0 | ND | 91.9 | 90-110 | 0.358 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AD03199-BLK1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03199-BS1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 21.2 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 21.0 | 0.060 | 0.25 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Nickel | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Zinc | 103 | 4.0 | 5.0 | ug/L | 100 | | 103 | 85-115 | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 1.27 | 0.80 | 2.0 | ug/L | | 1.28 | | | 0.788 | 20 | R-01, J |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.9 | 1.6 | 2.0 | ug/L | | 10.8 | | | 0.103 | 20 | |
| Lead | 1.44 | 0.24 | 1.0 | ug/L | | 1.38 | | | 3.92 | 20 | |
| Nickel | 1.65 | 1.2 | 2.0 | ug/L | | 1.78 | | | 7.60 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Silver | 0.389 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 96.5 | 16 | 20 | ug/L | | 96.0 | | | 0.490 | 20 | |
| **Matrix Spike (AD03199-MS1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.4 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 106 | 70-130 | | | |
| Arsenic | 21.0 | 1.6 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium | 23.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Copper | 34.2 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 117 | 70-130 | | | |
| Lead | 22.7 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 107 | 70-130 | | | |
| Nickel | 23.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 108 | 70-130 | | | |
| Selenium | 20.0 | 1.2 | 8.0 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 199 | 16 | 20 | ug/L | 100 | 96.0 | 103 | 70-130 | | | |
| **Matrix Spike (AD03199-MS2)** | | **Source: 20C3319-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | 0.977 | 99.5 | 70-130 | | | |
| Arsenic | 22.0 | 1.6 | 2.0 | ug/L | 20.0 | 1.91 | 100 | 70-130 | | | |
| Beryllium | 20.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 28.0 | 2.0 | 2.0 | ug/L | 20.0 | 4.72 | 116 | 70-130 | | | |
| Copper | 33.8 | 1.6 | 2.0 | ug/L | 20.0 | 13.8 | 99.9 | 70-130 | | | |
| Lead | 24.6 | 0.24 | 1.0 | ug/L | 20.0 | 3.41 | 106 | 70-130 | | | |
| Nickel | 29.4 | 1.2 | 2.0 | ug/L | 20.0 | 6.54 | 114 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 21.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc | 147 | 16 | 20 | ug/L | 100 | 48.9 | 98.2 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03199-MSD1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.3 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 105 | 70-130 | 0.276 | 20 | |
| Arsenic | 21.8 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.79 | 20 | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 0.171 | 20 | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 1.89 | 20 | |
| Chromium | 24.5 | 2.0 | 2.0 | ug/L | 20.0 | ND | 123 | 70-130 | 5.23 | 20 | |
| Copper | 31.8 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 105 | 70-130 | 7.37 | 20 | |
| Lead | 22.9 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 108 | 70-130 | 0.841 | 20 | |
| Nickel | 24.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 113 | 70-130 | 4.16 | 20 | |
| Selenium | 20.2 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.861 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 1.63 | 20 | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | 2.11 | 20 | |
| Zinc | 197 | 16 | 20 | ug/L | 100 | 96.0 | 101 | 70-130 | 0.940 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04990 - General Prep** | | | | | | | | | | | |
| **Blank (AC04990-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04990-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC04990-DUP1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04990-MS1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04990-MSD1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 2.87 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC04709-BLK1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0644 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC04709-BS1)** | | | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.7 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic, dissolved | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Beryllium, dissolved | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Cadmium, dissolved | 20.1 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | | 98.8 | 85-115 | | | |
| Copper, dissolved | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead, dissolved | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Nickel, dissolved | 19.1 | 0.30 | 0.50 | ug/L | 20.0 | | 95.7 | 85-115 | | | |
| Selenium, dissolved | 19.0 | 0.30 | 2.0 | ug/L | 20.0 | | 95.2 | 85-115 | | | |
| Silver, dissolved | 19.5 | 0.050 | 0.10 | ug/L | 20.0 | | 97.3 | 85-115 | | | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 100 | 4.0 | 5.0 | ug/L | 100 | | 100 | 85-115 | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Antimony, dissolved | ND | 0.40 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Arsenic, dissolved | 4.52 | 4.0 | 5.0 | ug/L | | 4.63 | | | 2.41 | 20 | R-01, J |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | | 0.776 | | | 200 | 20 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | | ND | | | | 20 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04709 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC04709-DUP1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/02/20 | | | | | | |
| Silver, dissolved | 0.195 | 0.10 | 0.20 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | | ND | | | | 20 | R-01, U |
| **Matrix Spike (AC04709-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Arsenic, dissolved | 25.0 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 102 | 70-130 | | | |
| Beryllium, dissolved | 19.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.0 | 70-130 | | | |
| Cadmium, dissolved | 19.4 | 0.12 | 0.20 | ug/L | 20.0 | ND | 97.2 | 70-130 | | | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.5 | 70-130 | | | |
| Copper, dissolved | 21.3 | 4.0 | 5.0 | ug/L | 20.0 | ND | 107 | 70-130 | | | |
| Lead, dissolved | 20.7 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 99.5 | 70-130 | | | |
| Nickel, dissolved | 19.2 | 3.0 | 5.0 | ug/L | 20.0 | ND | 96.1 | 70-130 | | | |
| Selenium, dissolved | 18.8 | 0.60 | 4.0 | ug/L | 20.0 | ND | 94.2 | 70-130 | | | |
| Silver, dissolved | 18.1 | 0.10 | 0.20 | ug/L | 20.0 | ND | 90.7 | 70-130 | | | |
| Thallium, dissolved | 20.8 | 0.50 | 1.0 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | | | |
| **Matrix Spike Dup (AC04709-MSD1)** | | **Source: 20C3138-02** | | | Prepared: 03/26/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.8 | 2.0 | 5.0 | ug/L | 20.0 | ND | 104 | 70-130 | 0.0761 | 20 | |
| Arsenic, dissolved | 24.6 | 4.0 | 5.0 | ug/L | 20.0 | 4.63 | 100 | 70-130 | 1.44 | 20 | |
| Beryllium, dissolved | 19.9 | 0.50 | 1.0 | ug/L | 20.0 | ND | 99.4 | 70-130 | 0.349 | 20 | |
| Cadmium, dissolved | 19.6 | 0.12 | 0.20 | ug/L | 20.0 | ND | 98.0 | 70-130 | 0.813 | 20 | |
| Chromium, dissolved | 19.1 | 5.0 | 5.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | 0.195 | 20 | |
| Copper, dissolved | 21.0 | 4.0 | 5.0 | ug/L | 20.0 | ND | 105 | 70-130 | 1.41 | 20 | |
| Lead, dissolved | 20.3 | 0.60 | 2.5 | ug/L | 20.0 | 0.776 | 97.6 | 70-130 | 1.86 | 20 | |
| Nickel, dissolved | 18.9 | 3.0 | 5.0 | ug/L | 20.0 | ND | 94.6 | 70-130 | 1.52 | 20 | |
| Selenium, dissolved | 19.3 | 0.60 | 4.0 | ug/L | 20.0 | ND | 96.3 | 70-130 | 2.20 | 20 | |
| Silver, dissolved | 18.6 | 0.10 | 0.20 | ug/L | 20.0 | ND | 92.9 | 70-130 | 2.41 | 20 | |
| Thallium, dissolved | 20.1 | 0.50 | 1.0 | ug/L | 20.0 | ND | 101 | 70-130 | 3.21 | 20 | |
| Zinc, dissolved | 102 | 40 | 50 | ug/L | 100 | ND | 102 | 70-130 | 0.549 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03331 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03331-BLK1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03331-BS1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 4.67 | 0.200 | 0.500 | ng/l | 5.00 | | 93.4 | 77-123 | | | |
| **Matrix Spike (AD03331-MS1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 29.0 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 88.0 | 71-125 | | | |
| **Matrix Spike (AD03331-MS2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 27.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 105 | 71-125 | | | |
| **Matrix Spike Dup (AD03331-MSD1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 28.8 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 87.2 | 71-125 | 0.726 | 24 | |
| **Matrix Spike Dup (AD03331-MSD2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 26.0 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 99.1 | 71-125 | 5.13 | 24 | |
| **Reference (AD03331-SRM1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 46.3 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03694 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03694-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 0.219 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AD03694-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 5.04 | 0.200 | 0.500 | ng/l | 5.00 | | 101 | 77-123 | | | |
| **Matrix Spike (AD03694-MS1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 24.6 | 0.200 | 0.500 | ng/l | 25.0 | ND | 98.4 | 71-125 | | | |
| **Matrix Spike (AD03694-MS2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.3 | 71-125 | | | |
| **Matrix Spike Dup (AD03694-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 23.7 | 0.200 | 0.500 | ng/l | 25.0 | ND | 94.7 | 71-125 | 3.85 | 24 | |
| **Matrix Spike Dup (AD03694-MSD2)** | | **Source: 20C2511-02** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 4.06 | 85.5 | 71-125 | 0.157 | 24 | |
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD04058-BLK1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD04058-BS1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 4.62 | 0.200 | 0.500 | ng/l | 5.00 | | 92.4 | 77-123 | | | |
| **Matrix Spike (AD04058-MS1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 96.6 | 71-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Matrix Spike Dup (AD04058-MSD1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.7 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 97.8 | 71-125 | 1.22 | 24 | |
| **Reference (AD04058-SRM1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 43.2 | 0.200 | 0.500 | ng/l | 50.0 | | 86.4 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03344 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03344-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03344-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.197 | 0.0020 | 0.0030 | mg/L | 0.200 | | 98.6 | 85-115 | | | |
| **Duplicate (AD03344-DUP1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03344-MS1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.166 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 82.9 | 85-115 | | | QM-05 |
| **Matrix Spike (AD03344-MS2)** | | **Source: 20C3401-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.221 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |
| **Matrix Spike Dup (AD03344-MSD1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 106 | 85-115 | 24.6 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04960 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC04960-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *64.3* | | | *ug/L* | *57.4* | | *112* | *39-120* | | | |
| **LCS (AC04960-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Diesel | 2000 | 50 | 250 | ug/L | 2100 | | 95.2 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *62.2* | | | *ug/L* | *57.4* | | *108* | *39-120* | | | |
| **LCS (AC04960-BS2)** | | | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Motor Oil | 1450 | 100 | 250 | ug/L | 2010 | | 72.0 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *61.3* | | | *ug/L* | *57.4* | | *107* | *39-120* | | | |
| **LCS Dup (AC04960-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Diesel | 1670 | 50 | 250 | ug/L | 2100 | | 79.3 | 61-120 | 18.2 | 25 | |
| *Surrogate: Tetratetracontane* | *43.5* | | | *ug/L* | *57.4* | | *75.8* | *39-120* | | | |
| **LCS Dup (AC04960-BSD2)** | | | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Motor Oil | 1460 | 100 | 250 | ug/L | 2010 | | 72.4 | 71-125 | 0.652 | 25 | |
| *Surrogate: Tetratetracontane* | *56.6* | | | *ug/L* | *57.4* | | *98.5* | *39-120* | | | |
| **Matrix Spike (AC04960-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| TPH as Diesel | 2060 | 50 | 250 | ug/L | 2100 | ND | 98.0 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *61.6* | | | *ug/L* | *57.4* | | *107* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03039 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03039-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *76-129* | | | |
| **LCS (AD03039-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 144 | 50 | 50 | ug/L | 200 | | 72.0 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.4* | | | *ug/L* | *25.0* | | *101* | *76-129* | | | |
| **LCS Dup (AD03039-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 147 | 50 | 50 | ug/L | 200 | | 73.6 | 67-132 | 2.11 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **Matrix Spike (AD03039-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 147 | 50 | 50 | ug/L | 200 | ND | 73.5 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *24.9* | | | *ug/L* | *25.0* | | *99.8* | *76-129* | | | |
| **Matrix Spike Dup (AD03039-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 143 | 50 | 50 | ug/L | 200 | ND | 71.4 | 37-156 | 2.88 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 53.1 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 47.0 | 2.0 | 5.0 | ug/L | 50.0 | | 94.1 | 60-140 | 12.0 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 56.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 112 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 54.7 | 2.0 | 5.0 | ug/L | 50.0 | ND | 109 | 40-160 | 2.35 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.4 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.8 | 3-225 | 0.369 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 105 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 102 | 3-305 | 3.25 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03040-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03040-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.8 | 0.30 | 0.30 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | | | |
| Carbon tetrachloride | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Chlorobenzene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.1 | 65-135 | | | |
| Dibromochloromethane | 22.6 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-135 | | | |
| Chloroethane | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.2 | 40-160 | | | |
| Chloroform | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-135 | | | |
| Bromodichloromethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,1-Dichloroethene | 18.9 | 0.30 | 0.50 | ug/L | 20.0 | | 94.4 | 50-150 | | | |
| 1,2-Dichloropropane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.4 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 87.8 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | | 94.0 | 50-150 | | | |
| Ethylbenzene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.2 | 60-140 | | | |
| Bromomethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 95.1 | 15-185 | | | |
| Chloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 2-205 | | | |
| Methylene chloride | 19.4 | 0.50 | 0.50 | ug/L | 20.0 | | 97.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 20.3 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | | | |
| Tetrachloroethene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 97.8 | 70-130 | | | |
| Toluene | 21.0 | 0.30 | 0.30 | ug/L | 20.0 | | 105 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.4 | 70-130 | | | |
| 1,1,1-Trichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| Trichloroethene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Vinyl chloride | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 5-195 | | | |
| 1,2-Dichlorobenzene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| 1,3-Dichlorobenzene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 98.8 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.10 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *29.3* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.4* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AD03040-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | 22.2 | 0.40 | 2.0 | ug/L | 20.0 | | 111 | 60-140 | 7.12 | 25 | |
| Benzene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 65-135 | 2.63 | 25 | |
| Bromoform | 23.1 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | 0.216 | 25 | |
| Carbon tetrachloride | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 1.47 | 25 | |
| Chlorobenzene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.0 | 65-135 | 0.104 | 25 | |
| Dibromochloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-135 | 4.70 | 25 | |
| Chloroethane | 17.2 | 0.40 | 0.50 | ug/L | 20.0 | | 85.8 | 40-160 | 2.87 | 25 | |
| Chloroform | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-135 | 0.232 | 25 | |
| Bromodichloromethane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 65-135 | 2.05 | 25 | |
| 1,1-Dichloroethane | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | 3.14 | 25 | |
| 1,2-Dichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | 0.717 | 25 | |
| 1,1-Dichloroethene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 95.8 | 50-150 | 1.53 | 25 | |
| 1,2-Dichloropropane | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | | 94.0 | 35-165 | 5.01 | 25 | |
| cis-1,3-Dichloropropene | 17.4 | 0.40 | 0.50 | ug/L | 20.0 | | 87.2 | 25-175 | 0.743 | 25 | |
| trans-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 92.1 | 50-150 | 2.10 | 25 | |
| Ethylbenzene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.4 | 60-140 | 0.767 | 25 | |
| Bromomethane | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | | 89.0 | 15-185 | 6.68 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 117 | 2-205 | 1.53 | 25 | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.8 | 60-140 | 2.90 | 25 | |
| 1,1,2,2-Tetrachloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 96.8 | 60-140 | 4.84 | 25 | |
| Tetrachloroethene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.6 | 70-130 | 0.764 | 25 | |
| Toluene | 20.8 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 70-130 | 0.909 | 25 | |
| trans-1,2-Dichloroethene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 99.8 | 70-130 | 5.61 | 25 | |
| 1,1,1-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 4.42 | 25 | |
| 1,1,2-Trichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 4.67 | 25 | |
| Trichloroethene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 1.90 | 25 | |
| Vinyl chloride | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 5-195 | 1.66 | 25 | |
| 1,2-Dichlorobenzene | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 94.8 | 65-135 | 1.47 | 25 | |
| 1,3-Dichlorobenzene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.4 | 70-130 | 3.55 | 25 | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 98.8 | 65-135 | 3.09 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.6* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03040-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/31/20 Analyzed: 04/02/20 | | | | | | |
| Acrylonitrile | 23.0 | 0.40 | 2.0 | ug/L | 20.0 | ND | 115 | 40-160 | | | |
| Benzene | 21.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 107 | 37-151 | | | |
| Bromoform | 24.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 120 | 45-169 | | | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | | | |
| Chlorobenzene | 20.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 104 | 37-160 | | | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 121 | 53-149 | | | |
| Chloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.7 | 14-230 | | | |
| Chloroform | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 51-138 | | | |
| Bromodichloromethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 35-155 | | | |
| 1,1-Dichloroethane | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | | | |
| 1,2-Dichloroethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 49-155 | | | |
| 1,1-Dichloroethene | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.4 | 2-210 | | | |
| cis-1,3-Dichloropropene | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 89.0 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.6 | 17-183 | | | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | | | |
| Bromomethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 2-242 | | | |
| Chloromethane | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 2-273 | | | |
| Methylene chloride | 20.4 | 0.50 | 0.50 | ug/L | 20.0 | ND | 102 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.1 | 46-157 | | | |
| Tetrachloroethene | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 64-148 | | | |
| Toluene | 22.8 | 0.30 | 0.30 | ug/L | 20.0 | ND | 114 | 47-150 | | | |
| trans-1,2-Dichloroethene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 54-156 | | | |
| 1,1,1-Trichloroethane | 24.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 120 | 52-162 | | | |
| 1,1,2-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | | | |
| Trichloroethene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 70-157 | | | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | | | |
| 1,2-Dichlorobenzene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 59-156 | | | |
| 1,4-Dichlorobenzene | 20.9 | 0.10 | 0.50 | ug/L | 20.0 | ND | 104 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.1* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03040-MSD1)** | | **Source: 20C3138-02** | | | Prepared: 03/31/20 Analyzed: 04/02/20 | | | | | | |
| Acrylonitrile | 23.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | 2.74 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 4.25 | 61 | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 116 | 45-169 | 3.47 | 42 | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | 0.155 | 41 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 37-160 | 3.61 | 53 | |
| Dibromochloromethane | 24.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 53-149 | 0.743 | 50 | |
| Chloroethane | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 14-230 | 8.12 | 78 | |
| Chloroform | 24.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 124 | 51-138 | 5.93 | 54 | |
| Bromodichloromethane | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 35-155 | 3.79 | 56 | |
| 1,1-Dichloroethane | 22.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 113 | 59-155 | 3.20 | 40 | |
| 1,2-Dichloroethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 49-155 | 0.863 | 49 | |
| 1,1-Dichloroethene | 22.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 114 | 2-234 | 6.21 | 32 | |
| 1,2-Dichloropropane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.8 | 2-210 | 1.43 | 55 | |
| cis-1,3-Dichloropropene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.4 | 2-227 | 5.94 | 58 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.6 | 17-183 | 0.00 | 86 | |
| Ethylbenzene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 37-162 | 2.37 | 63 | |
| Bromomethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-242 | 2.98 | 61 | |
| Chloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 2-273 | 0.886 | 60 | |
| Methylene chloride | 21.5 | 0.50 | 0.50 | ug/L | 20.0 | ND | 107 | 2-221 | 5.16 | 28 | |
| 1,1,2,2-Tetrachloroethane | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 96.7 | 46-157 | 2.45 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 1.84 | 39 | |
| Toluene | 22.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 47-150 | 2.21 | 41 | |
| trans-1,2-Dichloroethene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 54-156 | 6.29 | 45 | |
| 1,1,1-Trichloroethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 52-162 | 7.85 | 36 | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 52-150 | 4.27 | 45 | |
| Trichloroethene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 70-157 | 5.90 | 48 | |
| Vinyl chloride | 25.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 127 | 2-251 | 3.97 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 3.38 | 57 | |
| 1,3-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 59-156 | 0.432 | 43 | |
| 1,4-Dichlorobenzene | 21.3 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 1.95 | 57 | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.7* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05021-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05021-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *26.2* | | | *ug/L* | *40.0* | | *65.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *12.8* | | | *ug/L* | *40.0* | | *31.9* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *23.6* | | | *ug/L* | *40.0* | | *59.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.8* | | | *ug/L* | *40.0* | | *74.5* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *9.87* | | | *ug/L* | *40.0* | | *24.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *23.6* | | | *ug/L* | *40.0* | | *59.1* | *4-168* | | | |
| **LCS (AC05021-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| 2-Chlorophenol | 20.2 | 0.70 | 5.0 | ug/L | 40.0 | | 50.5 | 36-120 | | | |
| 2,4-Dichlorophenol | 22.1 | 0.70 | 5.0 | ug/L | 40.0 | | 55.3 | 53-122 | | | |
| 2,4-Dimethylphenol | 22.7 | 1.0 | 2.0 | ug/L | 50.0 | | 45.5 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 22.9 | 3.0 | 5.0 | ug/L | 40.0 | | 57.4 | 53-130 | | | |
| 2,4-Dinitrophenol | 19.5 | 5.0 | 5.0 | ug/L | 50.0 | | 39.0 | 10-173 | | | |
| 2-Nitrophenol | 20.2 | 0.90 | 10 | ug/L | 40.0 | | 50.4 | 45-167 | | | |
| 4-Nitrophenol | 9.91 | 3.0 | 10 | ug/L | 40.0 | | 24.8 | 13-129 | | | J |
| 4-Chloro-3-methylphenol | 30.5 | 1.0 | 1.0 | ug/L | 40.0 | | 76.2 | 41-128 | | | |
| Pentachlorophenol | 22.1 | 4.0 | 5.0 | ug/L | 40.0 | | 55.2 | 38-152 | | | |
| 2-Methylphenol (o-cresol) | 22.4 | 0.60 | 5.0 | ug/L | 40.0 | | 56.0 | 36-102 | | | |
| Phenol | 11.8 | 0.50 | 1.0 | ug/L | 40.0 | | 29.4 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 22.9 | 0.70 | 10 | ug/L | 40.0 | | 57.3 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 27.7 | 0.90 | 5.0 | ug/L | 40.0 | | 69.3 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 27.0 | 0.90 | 1.0 | ug/L | 40.0 | | 67.5 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 25.6 | 1.0 | 2.0 | ug/L | 40.0 | | 63.9 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 31.7 | 3.0 | 5.0 | ug/L | 40.0 | | 79.2 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 28.2 | 1.0 | 5.0 | ug/L | 40.0 | | 70.4 | 65-120 | | | |
| Butyl benzyl phthalate | 24.1 | 0.60 | 10 | ug/L | 40.0 | | 60.2 | 2-140 | | | |
| 2-Chloronaphthalene | 40.5 | 0.60 | 10 | ug/L | 40.0 | | 101 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 26.5 | 0.90 | 5.0 | ug/L | 40.0 | | 66.3 | 38-145 | | | |
| 1,2-Dichlorobenzene | 18.7 | 0.60 | 2.0 | ug/L | 40.0 | | 46.8 | 33-93 | | | |
| 1,4-Dichlorobenzene | 18.1 | 0.60 | 1.0 | ug/L | 40.0 | | 45.2 | 32-91 | | | |
| 1,3-Dichlorobenzene | 18.3 | 0.60 | 1.0 | ug/L | 40.0 | | 45.8 | 31-92 | | | |
| Diethyl phthalate | 22.1 | 0.30 | 2.0 | ug/L | 40.0 | | 55.2 | 2-120 | | | |
| Dimethyl phthalate | 20.8 | 0.80 | 2.0 | ug/L | 40.0 | | 52.1 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05021-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| Di-n-butyl phthalate | 29.9 | 0.90 | 10 | ug/L | 40.0 | | 74.8 | 8-120 | | | |
| 2,4-Dinitrotoluene | 25.5 | 0.80 | 5.0 | ug/L | 40.0 | | 63.7 | 48-127 | | | |
| 2,6-Dinitrotoluene | 28.6 | 0.80 | 5.0 | ug/L | 40.0 | | 71.6 | 68-137 | | | |
| Di-n-octyl phthalate | 20.9 | 0.60 | 10 | ug/L | 40.0 | | 52.2 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 29.4 | 0.60 | 1.0 | ug/L | 40.0 | | 73.4 | 52-115 | | | |
| Hexachlorobenzene | 28.4 | 0.90 | 1.0 | ug/L | 40.0 | | 70.9 | 8-142 | | | |
| Hexachlorobutadiene | 20.0 | 0.80 | 1.0 | ug/L | 40.0 | | 50.1 | 38-120 | | | |
| Hexachlorocyclopentadiene | 11.2 | 4.0 | 5.0 | ug/L | 40.0 | | 28.0 | 16-93 | | | |
| Hexachloroethane | 23.6 | 0.60 | 1.0 | ug/L | 40.0 | | 59.1 | 55-120 | | | |
| Isophorone | 29.1 | 0.30 | 1.0 | ug/L | 40.0 | | 72.6 | 47-180 | | | |
| Nitrobenzene | 26.9 | 0.90 | 1.0 | ug/L | 40.0 | | 67.2 | 54-158 | | | |
| N-Nitrosodimethylamine | 18.8 | 0.30 | 5.0 | ug/L | 40.0 | | 47.1 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 28.7 | 0.80 | 5.0 | ug/L | 40.0 | | 71.8 | 14-198 | | | |
| N-Nitrosodiphenylamine | 28.7 | 1.0 | 1.0 | ug/L | 40.0 | | 71.8 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 25.1 | 0.60 | 5.0 | ug/L | 40.0 | | 62.8 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *30.2* | | | *ug/L* | *40.0* | | *75.5* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *14.6* | | | *ug/L* | *40.0* | | *36.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *31.8* | | | *ug/L* | *40.0* | | *79.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *34.9* | | | *ug/L* | *40.0* | | *87.3* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *11.7* | | | *ug/L* | *40.0* | | *29.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *28.8* | | | *ug/L* | *40.0* | | *71.9* | *4-168* | | | |
| **Matrix Spike (AC05021-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| 2-Chlorophenol | 12.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 30.1 | 23-134 | | | |
| 2,4-Dichlorophenol | 13.2 | 0.70 | 5.0 | ug/L | 40.0 | ND | 33.1 | 39-135 | | | QM-05 |
| 2,4-Dimethylphenol | 5.42 | 1.0 | 2.0 | ug/L | 50.0 | ND | 10.8 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 5.82 | 3.0 | 5.0 | ug/L | 40.0 | ND | 14.6 | 7-181 | | | |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 50.0 | ND | | 10-191 | | | QM-05, U |
| 2-Nitrophenol | 25.9 | 0.90 | 10 | ug/L | 40.0 | ND | 64.8 | 29-182 | | | |
| 4-Nitrophenol | 3.03 | 3.0 | 10 | ug/L | 40.0 | ND | 7.58 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 12.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 31.4 | 22-147 | | | |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 40.0 | ND | | 14-176 | | | QM-05, U |
| 2-Methylphenol (o-cresol) | 8.22 | 0.60 | 5.0 | ug/L | 40.0 | ND | 20.6 | 9-124 | | | |
| Phenol | 6.24 | 0.50 | 1.0 | ug/L | 40.0 | ND | 15.6 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 9.56 | 0.70 | 10 | ug/L | 40.0 | ND | 23.9 | 37-144 | | | QM-05, J |
| Bis(2-chloroethoxy)methane | 23.5 | 0.90 | 5.0 | ug/L | 40.0 | ND | 58.8 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 23.8 | 0.90 | 1.0 | ug/L | 40.0 | ND | 59.4 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05021-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 21.3 | 1.0 | 2.0 | ug/L | 40.0 | ND | 53.3 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 30.1 | 3.0 | 5.0 | ug/L | 40.0 | ND | 75.2 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 26.8 | 1.0 | 5.0 | ug/L | 40.0 | ND | 66.9 | 53-127 | | | |
| Butyl benzyl phthalate | 23.1 | 0.60 | 10 | ug/L | 40.0 | ND | 57.8 | 2-152 | | | |
| 2-Chloronaphthalene | 19.5 | 0.60 | 10 | ug/L | 40.0 | ND | 48.8 | 60-120 | | | QM-05 |
| 4-Chlorophenyl phenyl ether | 28.1 | 0.90 | 5.0 | ug/L | 40.0 | ND | 70.4 | 25-158 | | | |
| 1,2-Dichlorobenzene | 16.6 | 0.60 | 2.0 | ug/L | 40.0 | ND | 41.5 | 7-104 | | | |
| 1,3-Dichlorobenzene | 15.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 39.1 | 1-106 | | | |
| 1,4-Dichlorobenzene | 16.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 40.3 | 3-105 | | | |
| Diethyl phthalate | 23.2 | 0.30 | 2.0 | ug/L | 40.0 | ND | 58.0 | 2-120 | | | |
| Dimethyl phthalate | 21.6 | 0.80 | 2.0 | ug/L | 40.0 | ND | 54.0 | 2-120 | | | |
| Di-n-butyl phthalate | 24.7 | 0.90 | 10 | ug/L | 40.0 | ND | 61.8 | 1-120 | | | |
| 2,4-Dinitrotoluene | 24.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 61.6 | 39-139 | | | |
| 2,6-Dinitrotoluene | 25.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 64.0 | 50-158 | | | |
| Di-n-octyl phthalate | 18.9 | 0.60 | 10 | ug/L | 40.0 | ND | 47.2 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 25.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 64.6 | 39-116 | | | |
| Hexachlorobenzene | 27.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 69.7 | 2-152 | | | |
| Hexachlorobutadiene | 18.4 | 0.80 | 1.0 | ug/L | 40.0 | ND | 46.1 | 24-120 | | | |
| Hexachlorocyclopentadiene | 9.95 | 4.0 | 5.0 | ug/L | 40.0 | ND | 24.9 | 10-93 | | | |
| Hexachloroethane | 16.2 | 0.60 | 1.0 | ug/L | 40.0 | ND | 40.6 | 40-120 | | | |
| Isophorone | 24.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 60.2 | 21-196 | | | |
| Nitrobenzene | 22.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 56.4 | 35-180 | | | |
| N-Nitrosodimethylamine | 14.9 | 0.30 | 5.0 | ug/L | 40.0 | ND | 37.2 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 24.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 60.8 | 2-230 | | | |
| N-Nitrosodiphenylamine | 26.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 65.0 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 17.5 | 0.60 | 5.0 | ug/L | 40.0 | ND | 43.6 | 44-142 | | | QM-05 |
| *Surrogate: 2-Fluorobiphenyl* | *22.9* | | | *ug/L* | *40.0* | | *57.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *5.48* | | | *ug/L* | *40.0* | | *13.7* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *24.9* | | | *ug/L* | *40.0* | | *62.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.7* | | | *ug/L* | *40.0* | | *76.8* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *4.58* | | | *ug/L* | *40.0* | | *11.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *13.4* | | | *ug/L* | *40.0* | | *33.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05021-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| 2-Chlorophenol | 12.8 | 0.70 | 5.0 | ug/L | 40.0 | ND | 31.9 | 23-134 | 5.97 | 61 | |
| 2,4-Dichlorophenol | 13.8 | 0.70 | 5.0 | ug/L | 40.0 | ND | 34.6 | 39-135 | 4.43 | 50 | QM-05 |
| 2,4-Dimethylphenol | 5.73 | 1.0 | 2.0 | ug/L | 50.0 | ND | 11.5 | 32-120 | 5.56 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 11.9 | 3.0 | 5.0 | ug/L | 40.0 | ND | 29.8 | 7-181 | 68.8 | 203 | |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 50.0 | ND | | 10-191 | | 132 | QM-05, U |
| 2-Nitrophenol | 26.8 | 0.90 | 10 | ug/L | 40.0 | ND | 67.1 | 29-182 | 3.49 | 55 | |
| 4-Nitrophenol | 5.19 | 3.0 | 10 | ug/L | 40.0 | ND | 13.0 | 7-132 | 52.6 | 131 | J |
| 4-Chloro-3-methylphenol | 12.1 | 1.0 | 1.0 | ug/L | 40.0 | ND | 30.3 | 22-147 | 3.56 | 73 | |
| 2-Methylphenol (o-cresol) | 8.36 | 0.60 | 5.0 | ug/L | 40.0 | ND | 20.9 | 9-124 | 1.69 | 28 | |
| Pentachlorophenol | 6.99 | 4.0 | 5.0 | ug/L | 40.0 | ND | 17.5 | 14-176 | 200 | 86 | QM-08 |
| Phenol | 6.38 | 0.50 | 1.0 | ug/L | 40.0 | ND | 16.0 | 5-120 | 2.22 | 64 | |
| 2,4,6-Trichlorophenol | 13.0 | 0.70 | 10 | ug/L | 40.0 | ND | 32.5 | 37-144 | 30.4 | 58 | QM-05 |
| Bis(2-chloroethoxy)methane | 27.5 | 0.90 | 5.0 | ug/L | 40.0 | ND | 68.8 | 33-184 | 15.7 | 54 | |
| Bis(2-chloroethyl)ether | 26.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 65.0 | 12-158 | 8.88 | 108 | |
| Bis(2-chloroisopropyl)ether | 24.5 | 1.0 | 2.0 | ug/L | 40.0 | ND | 61.2 | 36-166 | 13.8 | 76 | |
| Bis(2-ethylhexyl)phthalate | 32.8 | 3.0 | 5.0 | ug/L | 40.0 | ND | 81.9 | 8-158 | 8.47 | 82 | |
| 4-Bromophenyl phenyl ether | 30.7 | 1.0 | 5.0 | ug/L | 40.0 | ND | 76.8 | 53-127 | 13.8 | 43 | |
| Butyl benzyl phthalate | 25.1 | 0.60 | 10 | ug/L | 40.0 | ND | 62.8 | 2-152 | 8.41 | 60 | |
| 2-Chloronaphthalene | 29.7 | 0.60 | 10 | ug/L | 40.0 | ND | 74.3 | 60-120 | 41.5 | 24 | QM-08 |
| 4-Chlorophenyl phenyl ether | 25.1 | 0.90 | 5.0 | ug/L | 40.0 | ND | 62.8 | 25-158 | 11.4 | 61 | |
| 1,4-Dichlorobenzene | 20.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.6 | 3-105 | 24.5 | 42 | |
| 1,3-Dichlorobenzene | 20.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 51.2 | 1-106 | 26.9 | 41 | |
| 1,2-Dichlorobenzene | 20.9 | 0.60 | 2.0 | ug/L | 40.0 | ND | 52.3 | 7-104 | 23.1 | 41 | |
| Diethyl phthalate | 18.6 | 0.30 | 2.0 | ug/L | 40.0 | ND | 46.6 | 2-120 | 21.8 | 100 | |
| Dimethyl phthalate | 21.3 | 0.80 | 2.0 | ug/L | 40.0 | ND | 53.2 | 2-120 | 1.49 | 183 | |
| Di-n-butyl phthalate | 32.2 | 0.90 | 10 | ug/L | 40.0 | ND | 80.4 | 1-120 | 26.1 | 47 | |
| 2,4-Dinitrotoluene | 21.7 | 0.80 | 5.0 | ug/L | 40.0 | ND | 54.2 | 39-139 | 12.9 | 42 | |
| 2,6-Dinitrotoluene | 26.5 | 0.80 | 5.0 | ug/L | 40.0 | ND | 66.3 | 50-158 | 3.65 | 48 | |
| Di-n-octyl phthalate | 18.2 | 0.60 | 10 | ug/L | 40.0 | ND | 45.4 | 4-146 | 3.73 | 69 | |
| 1,2-Diphenylhydrazine | 30.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 77.0 | 39-116 | 17.5 | 25 | |
| Hexachlorobenzene | 30.0 | 0.90 | 1.0 | ug/L | 40.0 | ND | 75.0 | 2-152 | 7.36 | 55 | |
| Hexachlorobutadiene | 21.7 | 0.80 | 1.0 | ug/L | 40.0 | ND | 54.4 | 24-120 | 16.4 | 62 | |
| Hexachlorocyclopentadiene | 16.8 | 4.0 | 5.0 | ug/L | 40.0 | ND | 41.9 | 10-93 | 51.0 | 55 | |
| Hexachloroethane | 20.3 | 0.60 | 1.0 | ug/L | 40.0 | ND | 50.8 | 40-120 | 22.4 | 52 | |
| Isophorone | 29.3 | 0.30 | 1.0 | ug/L | 40.0 | ND | 73.3 | 21-196 | 19.5 | 93 | |
| Nitrobenzene | 25.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 64.7 | 35-180 | 13.8 | 62 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05021 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05021-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| N-Nitrosodimethylamine | 21.5 | 0.30 | 5.0 | ug/L | 40.0 | ND | 53.8 | 10-84 | 36.5 | 59 | |
| N-Nitrosodi-n-propylamine | 28.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 72.2 | 2-230 | 17.0 | 87 | |
| N-Nitrosodiphenylamine | 30.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 76.4 | 40-115 | 16.2 | 25 | |
| 1,2,4-Trichlorobenzene | 21.7 | 0.60 | 5.0 | ug/L | 40.0 | ND | 54.2 | 44-142 | 21.5 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *33.8* | | | *ug/L* | *40.0* | | *84.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *6.25* | | | *ug/L* | *40.0* | | *15.6* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *27.7* | | | *ug/L* | *40.0* | | *69.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *26.3* | | | *ug/L* | *40.0* | | *65.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *4.88* | | | *ug/L* | *40.0* | | *12.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *16.8* | | | *ug/L* | *40.0* | | *42.1* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04875 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04875-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *35.8* | | | *ug/L* | *40.0* | | *89.4* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.7* | | | *ug/L* | *40.0* | | *96.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.5* | | | *ug/L* | *40.0* | | *106* | *36-141* | | | |
| **LCS (AC04875-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 13.0 | 3.00 | 5.00 | ug/L | 79.4 | | 16.4 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 76.0 | 2.00 | 5.00 | ug/L | 79.4 | | 95.8 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *36.6* | | | *ug/L* | *40.0* | | *91.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.3* | | | *ug/L* | *40.0* | | *95.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.9* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| **Matrix Spike (AC04875-MS1)** | | **Source: 20C2864-01** | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 11.6 | 3.00 | 5.00 | ug/L | 79.4 | ND | 14.6 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 72.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 91.4 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.0* | | | *ug/L* | *40.0* | | *84.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.1* | | | *ug/L* | *40.0* | | *90.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *24.7* | | | *ug/L* | *40.0* | | *61.7* | *36-141* | | | |
| **Matrix Spike Dup (AC04875-MSD1)** | | **Source: 20C2864-01** | | | Prepared: 03/30/20 Analyzed: 04/06/20 | | | | | | |
| Benzidine | 12.0 | 3.00 | 5.00 | ug/L | 79.4 | ND | 15.1 | 4-262 | 3.47 | 108 | |
| 3,3´-Dichlorobenzidine | 58.5 | 2.00 | 5.00 | ug/L | 79.4 | ND | 73.8 | 4-262 | 21.4 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.2* | | | *ug/L* | *40.0* | | *93.1* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.4* | | | *ug/L* | *40.0* | | *98.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.5* | | | *ug/L* | *40.0* | | *71.3* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03661 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03661-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *17.7* | | | *ug/L* | *40.0* | | *44.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *26.5* | | | *ug/L* | *40.0* | | *66.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.9* | | | *ug/L* | *40.0* | | *82.2* | *37-139* | | | |
| **LCS (AD03661-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | 28.0 | 0.20 | 0.20 | ug/L | 40.0 | | 70.0 | 60-132 | | | |
| Acenaphthylene | 29.2 | 0.20 | 0.20 | ug/L | 40.0 | | 73.1 | 54-126 | | | |
| Anthracene | 30.2 | 0.090 | 0.20 | ug/L | 40.0 | | 75.5 | 43-120 | | | |
| Benzo (a) anthracene | 29.1 | 0.20 | 0.20 | ug/L | 40.0 | | 72.6 | 42-133 | | | |
| Benzo (a) pyrene | 29.9 | 0.20 | 0.20 | ug/L | 40.0 | | 74.8 | 32-148 | | | |
| Benzo (b) fluoranthene | 30.0 | 0.20 | 0.20 | ug/L | 40.0 | | 75.0 | 42-140 | | | |
| Benzo (g,h,i) perylene | 42.3 | 0.10 | 0.20 | ug/L | 40.0 | | 106 | 2-195 | | | |
| Benzo (k) fluoranthene | 29.8 | 0.20 | 0.20 | ug/L | 40.0 | | 74.5 | 25-146 | | | |
| Chrysene | 29.8 | 0.20 | 0.20 | ug/L | 40.0 | | 74.6 | 44-140 | | | |
| Dibenz (a,h) anthracene | 43.5 | 0.10 | 0.20 | ug/L | 40.0 | | 109 | 2-200 | | | |
| Fluoranthene | 28.6 | 0.070 | 0.20 | ug/L | 40.0 | | 71.5 | 43-121 | | | |
| Fluorene | 29.5 | 0.20 | 0.20 | ug/L | 40.0 | | 73.8 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 40.1 | 0.030 | 0.20 | ug/L | 40.0 | | 100 | 2-151 | | | |
| Naphthalene | 23.1 | 0.090 | 0.20 | ug/L | 40.0 | | 57.7 | 36-120 | | | |
| Phenanthrene | 31.1 | 0.10 | 0.20 | ug/L | 40.0 | | 77.8 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03661 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03661-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Pyrene | 31.8 | 0.20 | 0.20 | ug/L | 40.0 | | 79.4 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.2* | | | *ug/L* | *40.0* | | *73.1* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *43.8* | | | *ug/L* | *40.0* | | *109* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.0* | | | *ug/L* | *40.0* | | *92.4* | *37-139* | | | |
| **Matrix Spike (AD03661-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | 23.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 59.2 | 47-145 | | | |
| Acenaphthylene | 24.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 61.6 | 33-145 | | | |
| Anthracene | 24.9 | 0.090 | 0.20 | ug/L | 40.0 | ND | 62.2 | 27-133 | | | |
| Benzo (a) anthracene | 26.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 65.3 | 33-143 | | | |
| Benzo (a) pyrene | 24.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 61.0 | 17-163 | | | |
| Benzo (b) fluoranthene | 27.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 69.3 | 24-159 | | | |
| Benzo (g,h,i) perylene | 33.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 82.6 | 2-219 | | | |
| Benzo (k) fluoranthene | 28.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 70.1 | 11-162 | | | |
| Chrysene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 64.9 | 17-168 | | | |
| Dibenz (a,h) anthracene | 34.1 | 0.10 | 0.20 | ug/L | 40.0 | ND | 85.4 | 2-227 | | | |
| Fluoranthene | 25.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 64.1 | 26-137 | | | |
| Fluorene | 21.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 53.1 | 59-121 | | | QM-05 |
| Indeno (1,2,3-cd) pyrene | 32.3 | 0.030 | 0.20 | ug/L | 40.0 | ND | 80.8 | 2-171 | | | |
| Naphthalene | 19.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 48.5 | 21-133 | | | |
| Phenanthrene | 24.5 | 0.10 | 0.20 | ug/L | 40.0 | ND | 61.2 | 54-120 | | | |
| Pyrene | 26.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 66.9 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *26.4* | | | *ug/L* | *40.0* | | *66.0* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.2* | | | *ug/L* | *40.0* | | *70.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.2* | | | *ug/L* | *40.0* | | *73.0* | *37-139* | | | |
| **Matrix Spike Dup (AD03661-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Acenaphthene | 27.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 67.9 | 47-145 | 13.7 | 48 | |
| Acenaphthylene | 28.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.6 | 33-145 | 15.1 | 74 | |
| Anthracene | 30.2 | 0.090 | 0.20 | ug/L | 40.0 | ND | 75.6 | 27-133 | 19.5 | 66 | |
| Benzo (a) anthracene | 29.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 74.2 | 33-143 | 12.7 | 53 | |
| Benzo (a) pyrene | 25.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 63.4 | 17-163 | 3.82 | 72 | |
| Benzo (b) fluoranthene | 28.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 72.2 | 24-159 | 4.10 | 71 | |
| Benzo (g,h,i) perylene | 31.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 78.9 | 2-219 | 4.64 | 97 | |
| Benzo (k) fluoranthene | 28.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 71.4 | 11-162 | 1.84 | 63 | |
| Chrysene | 29.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 72.8 | 17-168 | 11.4 | 87 | |
| Dibenz (a,h) anthracene | 33.9 | 0.10 | 0.20 | ug/L | 40.0 | ND | 84.8 | 2-227 | 0.646 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 13:22 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03661 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03661-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/10/20 | | | | | | |
| Fluoranthene | 34.0 | 0.070 | 0.20 | ug/L | 40.0 | ND | 84.9 | 26-137 | 28.0 | 66 | |
| Fluorene | 28.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 69.9 | 59-121 | 27.2 | 38 | |
| Indeno (1,2,3-cd) pyrene | 31.1 | 0.030 | 0.20 | ug/L | 40.0 | ND | 77.8 | 2-171 | 3.75 | 99 | |
| Naphthalene | 22.4 | 0.090 | 0.20 | ug/L | 40.0 | ND | 55.9 | 21-133 | 14.2 | 65 | |
| Phenanthrene | 29.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 73.2 | 54-120 | 17.9 | 39 | |
| Pyrene | 34.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 87.3 | 52-120 | 26.5 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *32.1* | | | *ug/L* | *40.0* | | *80.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.3* | | | *ug/L* | *40.0* | | *88.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *37.0* | | | *ug/L* | *40.0* | | *92.4* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 13:22 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20C3138



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | **PO#** |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

1.9°C which

**Analysis Request**

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | Matrix | | | 624 CTR Group-List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter David C Walt | | | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | 24 hr ○ |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | 48 hr ○ |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | Lab Approval Required |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | 1 wk ○ |
| EMSA-DMW-3 | 3-24-2020 | 1240 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | 2 wk (standard) ⊘ |
| EMSA-DMW-4s | ↓ | 1030 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | Lab Approval Required For Rush |
| EMSA-DMW-4d | | 1130 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-5 | ↓ | 1350 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-24-2020 | – | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/24/20 | 1551 |
| | | 3-24-20 | 18:22 |
| PM | PM | 3-24-20 | 20:44 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report — Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**

**Printed: 3/25/2020 11:55:07AM**

**20C3138**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 04/08/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/24/20 20:44

Logged In By: Sean Foley — Date Logged In: 03/25/20 11:50

Samples Received at: 5.8 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C3138-01 EMSA-DMW-3 [Water] Sampled 03/24/20 12:40 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/21/20 12:40 | | |
| **20C3138-01 EMSA-DMW-3 [Water] Sampled 03/24/20 12:40 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/21/20 12:40 | | |
| **20C3138-02 EMSA-DMW-4s [Water] Sampled 03/24/20 10:30 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 | BAL Metals | 04/21/20 10:30 | | |
| **20C3138-02 EMSA-DMW-4s [Water] Sampled 03/24/20 10:30 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/21/20 10:30 | | |
| **20C3138-03 EMSA-DMW-4d [Water] Sampled 03/24/20 11:30 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 | BAL Metals | 04/21/20 11:30 | | |
| **20C3138-03 EMSA-DMW-4d [Water] Sampled 03/24/20 11:30 (GMT-08:00) Paci** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/21/20 11:30 | | |
| **20C3138-04 EMSA-DMW-5 [Water] Sampled 03/24/20 13:50 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/21/20 13:50 | | |
| **20C3138-04 EMSA-DMW-5 [Water] Sampled 03/24/20 13:50 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/21/20 13:50 | | |

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| | 3-25-20 | | | 3-25-20 | 13:42 |
| | 3-25-20 | 17:45 | VW | 3/25/20 | 1745 |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

22 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C3406

Enclosed are the results of analyses for samples received by the laboratory on 03/26/20 20:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:06 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| BKGD-2 | 20C3406-01 | Water | 03/26/20 10:45 | 03/26/20 20:25 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AD03309 | 04/07/20 14:50 | 04/07/20 14:50 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | R-01, U |
| **Arsenic** | **5.6** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | R-01, U |
| **Copper** | **11** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Selenium | ND | 0.60 | 4.0 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:07 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:28 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 19:53 | 03/30/20 19:53 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Arsenic, dissolved** | **5.8** | **4.0** | **5.0** | **ug/L** | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Selenium, dissolved | ND | 0.60 | 4.0 | ug/L | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:19 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 19:54 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| **Mercury** | **2.36** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 17:25 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water** | **Sampled: 03/26/20 10:45** | | **Received: 03/26/20 20:25** | | | | | | | | | |
| **Mercury, dissolved** | **1.11** | **0.200** | **0.500** | **ng/l** | 1 | AD04058 | 04/15/20 16:00 | 04/16/20 14:48 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:42 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC05092 | 03/31/20 13:31 | 04/09/20 02:36 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC05092 | 03/31/20 13:31 | 04/09/20 02:36 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *57.2 %* | *39-120* | | | *AC05092* | *03/31/20 13:31* | *04/09/20 02:36* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| TPH as Gasoline | ND | | 50 | ug/L | 1 | AC05006 | 03/30/20 09:00 | 04/01/20 02:22 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *97.6 %* | *76-129* | | | *AC05006* | *03/30/20 09:00* | *04/01/20 02:22* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 10:00 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 10:00 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *108 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:00* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| **Benzene** | **0.48** | **0.30** | **0.30** | **ug/L** | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AC05007 | 03/31/20 09:00 | 04/01/20 02:22 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 02:22* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *114 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 02:22* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *111 %* | *70-130* | | | *AC05007* | *03/31/20 09:00* | *04/01/20 02:22* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **3.1** | **0.90** | **10** | **ug/L** | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 02:44 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *88.9 %* | *27-119* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *59.5 %* | *7-85* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *95.0 %* | *15-314* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *95.3 %* | *36-141* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *33.2 %* | *1-65* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *117 %* | *4-168* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 02:44* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AD03025 | 04/01/20 07:35 | 04/08/20 19:32 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AD03025 | 04/01/20 07:35 | 04/08/20 19:32 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *83.2 %* | *27-119* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 19:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *86.4 %* | *15-314* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 19:32* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *98.0 %* | *36-141* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 19:32* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BKGD-2 (20C3406-01) Water Sampled: 03/26/20 10:45 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 17:46 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *79.8 %* | *24-119* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 17:46* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *70.2 %* | *15-314* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 17:46* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *123 %* | *37-139* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 17:46* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03309 - General Prep** | | | | | | | | | | | |
| **Blank (AD03309-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03309-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AD03309-DUP1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03309-MS1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.96 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.6 | 90-110 | | | |
| **Matrix Spike Dup (AD03309-MSD1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 0.100 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AD03199-BLK1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03199-BS1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 21.2 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 21.0 | 0.060 | 0.25 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Nickel | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Zinc | 103 | 4.0 | 5.0 | ug/L | 100 | | 103 | 85-115 | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 1.27 | 0.80 | 2.0 | ug/L | | 1.28 | | | 0.788 | 20 | R-01, J |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.9 | 1.6 | 2.0 | ug/L | | 10.8 | | | 0.103 | 20 | |
| Lead | 1.44 | 0.24 | 1.0 | ug/L | | 1.38 | | | 3.92 | 20 | |
| Nickel | 1.65 | 1.2 | 2.0 | ug/L | | 1.78 | | | 7.60 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Silver | 0.389 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 96.5 | 16 | 20 | ug/L | | 96.0 | | | 0.490 | 20 | |
| **Matrix Spike (AD03199-MS1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.4 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 106 | 70-130 | | | |
| Arsenic | 21.0 | 1.6 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium | 23.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Copper | 34.2 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 117 | 70-130 | | | |
| Lead | 22.7 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 107 | 70-130 | | | |
| Nickel | 23.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 108 | 70-130 | | | |
| Selenium | 20.0 | 1.2 | 8.0 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 199 | 16 | 20 | ug/L | 100 | 96.0 | 103 | 70-130 | | | |
| **Matrix Spike (AD03199-MS2)** | | **Source: 20C3319-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | 0.977 | 99.5 | 70-130 | | | |
| Arsenic | 22.0 | 1.6 | 2.0 | ug/L | 20.0 | 1.91 | 100 | 70-130 | | | |
| Beryllium | 20.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 28.0 | 2.0 | 2.0 | ug/L | 20.0 | 4.72 | 116 | 70-130 | | | |
| Copper | 33.8 | 1.6 | 2.0 | ug/L | 20.0 | 13.8 | 99.9 | 70-130 | | | |
| Lead | 24.6 | 0.24 | 1.0 | ug/L | 20.0 | 3.41 | 106 | 70-130 | | | |
| Nickel | 29.4 | 1.2 | 2.0 | ug/L | 20.0 | 6.54 | 114 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 21.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc | 147 | 16 | 20 | ug/L | 100 | 48.9 | 98.2 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03199-MSD1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.3 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 105 | 70-130 | 0.276 | 20 | |
| Arsenic | 21.8 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.79 | 20 | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 0.171 | 20 | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 1.89 | 20 | |
| Chromium | 24.5 | 2.0 | 2.0 | ug/L | 20.0 | ND | 123 | 70-130 | 5.23 | 20 | |
| Copper | 31.8 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 105 | 70-130 | 7.37 | 20 | |
| Lead | 22.9 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 108 | 70-130 | 0.841 | 20 | |
| Nickel | 24.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 113 | 70-130 | 4.16 | 20 | |
| Selenium | 20.2 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.861 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 1.63 | 20 | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | 2.11 | 20 | |
| Zinc | 197 | 16 | 20 | ug/L | 100 | 96.0 | 101 | 70-130 | 0.940 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04990 - General Prep** | | | | | | | | | | | |
| **Blank (AC04990-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04990-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC04990-DUP1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04990-MS1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04990-MSD1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 2.87 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05014 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC05014-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0905 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC05014-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic, dissolved | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Beryllium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Cadmium, dissolved | 20.2 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium, dissolved | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.8 | 85-115 | | | |
| Copper, dissolved | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead, dissolved | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Nickel, dissolved | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Selenium, dissolved | 19.4 | 0.30 | 2.0 | ug/L | 20.0 | | 97.0 | 85-115 | | | |
| Silver, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Thallium, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 99.6 | 4.0 | 5.0 | ug/L | 100 | | 99.6 | 85-115 | | | |
| **Duplicate (AC05014-DUP1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | ND | | | | 20 | U |
| Arsenic, dissolved | 0.941 | 0.40 | 0.50 | ug/L | | 1.09 | | | 14.9 | 20 | |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper, dissolved | 0.560 | 0.40 | 0.50 | ug/L | | 0.547 | | | 2.25 | 20 | |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | ND | | | | 20 | U |
| Nickel, dissolved | 6.44 | 0.30 | 0.50 | ug/L | | 6.51 | | | 1.10 | 20 | |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05014 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC05014-DUP1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| Silver, dissolved | 0.0546 | 0.050 | 0.10 | ug/L | | ND | | | 200 | 20 | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC05014-MS1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 21.9 | 0.20 | 0.50 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Arsenic, dissolved | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | 1.09 | 106 | 70-130 | | | |
| Beryllium, dissolved | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Cadmium, dissolved | 20.8 | 0.060 | 0.10 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium, dissolved | 19.9 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.5 | 70-130 | | | |
| Copper, dissolved | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | 0.547 | 100 | 70-130 | | | |
| Lead, dissolved | 19.7 | 0.060 | 0.25 | ug/L | 20.0 | ND | 98.7 | 70-130 | | | |
| Nickel, dissolved | 24.7 | 0.30 | 0.50 | ug/L | 20.0 | 6.51 | 91.1 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 99.7 | 70-130 | | | |
| Zinc, dissolved | 99.1 | 4.0 | 5.0 | ug/L | 100 | ND | 99.1 | 70-130 | | | |
| **Matrix Spike Dup (AC05014-MSD1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | 1.30 | 20 | |
| Arsenic, dissolved | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | 1.09 | 104 | 70-130 | 2.00 | 20 | |
| Beryllium, dissolved | 20.0 | 0.050 | 0.10 | ug/L | 20.0 | ND | 100 | 70-130 | 1.14 | 20 | |
| Cadmium, dissolved | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 2.44 | 20 | |
| Chromium, dissolved | 19.4 | 0.50 | 0.50 | ug/L | 20.0 | ND | 97.0 | 70-130 | 2.54 | 20 | |
| Copper, dissolved | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | 0.547 | 99.6 | 70-130 | 0.665 | 20 | |
| Lead, dissolved | 19.5 | 0.060 | 0.25 | ug/L | 20.0 | ND | 97.4 | 70-130 | 1.32 | 20 | |
| Nickel, dissolved | 24.0 | 0.30 | 0.50 | ug/L | 20.0 | 6.51 | 87.2 | 70-130 | 3.23 | 20 | |
| Selenium, dissolved | 19.9 | 0.30 | 2.0 | ug/L | 20.0 | ND | 99.7 | 70-130 | 1.18 | 20 | |
| Silver, dissolved | 19.8 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.9 | 70-130 | 2.67 | 20 | |
| Thallium, dissolved | 19.7 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.4 | 70-130 | 1.28 | 20 | |
| Zinc, dissolved | 97.6 | 4.0 | 5.0 | ug/L | 100 | ND | 97.6 | 70-130 | 1.56 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03331 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03331-BLK1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03331-BS1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 4.67 | 0.200 | 0.500 | ng/l | 5.00 | | 93.4 | 77-123 | | | |
| **Matrix Spike (AD03331-MS1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 29.0 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 88.0 | 71-125 | | | |
| **Matrix Spike (AD03331-MS2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 27.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 105 | 71-125 | | | |
| **Matrix Spike Dup (AD03331-MSD1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 28.8 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 87.2 | 71-125 | 0.726 | 24 | |
| **Matrix Spike Dup (AD03331-MSD2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 26.0 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 99.1 | 71-125 | 5.13 | 24 | |
| **Reference (AD03331-SRM1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 46.3 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD04058-BLK1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD04058-BS1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 4.62 | 0.200 | 0.500 | ng/l | 5.00 | | 92.4 | 77-123 | | | |
| **Matrix Spike (AD04058-MS1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 96.6 | 71-125 | | | |
| **Matrix Spike Dup (AD04058-MSD1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.7 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 97.8 | 71-125 | 1.22 | 24 | |
| **Reference (AD04058-SRM1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 43.2 | 0.200 | 0.500 | ng/l | 50.0 | | 86.4 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03344 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03344-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03344-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.197 | 0.0020 | 0.0030 | mg/L | 0.200 | | 98.6 | 85-115 | | | |
| **Duplicate (AD03344-DUP1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03344-MS1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.166 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 82.9 | 85-115 | | | QM-05 |
| **Matrix Spike (AD03344-MS2)** | | **Source: 20C3401-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.221 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |
| **Matrix Spike Dup (AD03344-MSD1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 106 | 85-115 | 24.6 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05092 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC05092-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *50.8* | | | *ug/L* | *57.4* | | *88.5* | *39-120* | | | |
| **LCS (AC05092-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | 2190 | 50 | 250 | ug/L | 2100 | | 104 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *55.3* | | | *ug/L* | *57.4* | | *96.3* | *39-120* | | | |
| **LCS (AC05092-BS2)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Motor Oil | 1490 | 100 | 250 | ug/L | 2010 | | 74.0 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *55.1* | | | *ug/L* | *57.4* | | *96.0* | *39-120* | | | |
| **LCS Dup (AC05092-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | 2060 | 50 | 250 | ug/L | 2100 | | 98.1 | 61-120 | 6.30 | 25 | |
| *Surrogate: Tetratetracontane* | *39.4* | | | *ug/L* | *57.4* | | *68.7* | *39-120* | | | |
| **LCS Dup (AC05092-BSD2)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Motor Oil | 1460 | 100 | 250 | ug/L | 2010 | | 72.7 | 71-125 | 1.65 | 25 | |
| *Surrogate: Tetratetracontane* | *53.7* | | | *ug/L* | *57.4* | | *93.6* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05006 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05006-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *76-129* | | | |
| **LCS (AC05006-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 152 | 50 | 50 | ug/L | 200 | | 75.8 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.6* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **LCS Dup (AC05006-BSD1)** | | | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| TPH as Gasoline | 173 | 50 | 50 | ug/L | 200 | | 86.5 | 67-132 | 13.2 | 25 | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *76-129* | | | |
| **Matrix Spike (AC05006-MS1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 174 | 50 | 50 | ug/L | 200 | ND | 87.2 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *25.5* | | | *ug/L* | *25.0* | | *102* | *76-129* | | | |
| **Matrix Spike Dup (AC05006-MSD1)** | | **Source: 20C2261-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| TPH as Gasoline | 159 | 50 | 50 | ug/L | 200 | ND | 79.5 | 37-156 | 9.24 | 25 | |
| *Surrogate: Toluene-d8* | *24.5* | | | *ug/L* | *25.0* | | *97.9* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 53.1 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 47.0 | 2.0 | 5.0 | ug/L | 50.0 | | 94.1 | 60-140 | 12.0 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 56.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 112 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 54.7 | 2.0 | 5.0 | ug/L | 50.0 | ND | 109 | 40-160 | 2.35 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.4 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.8 | 3-225 | 0.369 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 105 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 102 | 3-305 | 3.25 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05007-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05007-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.9 | 0.30 | 0.30 | ug/L | 20.0 | | 99.6 | 65-135 | | | |
| Bromoform | 21.5 | 0.30 | 0.50 | ug/L | 20.0 | | 107 | 70-130 | | | |
| Carbon tetrachloride | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | | | |
| Chlorobenzene | 19.0 | 0.30 | 0.50 | ug/L | 20.0 | | 95.0 | 65-135 | | | |
| Dibromochloromethane | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | | 112 | 70-135 | | | |
| Chloroethane | 17.5 | 0.40 | 0.50 | ug/L | 20.0 | | 87.6 | 40-160 | | | |
| Chloroform | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 70-135 | | | |
| Bromodichloromethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | | | |
| 1,1-Dichloroethene | 18.0 | 0.30 | 0.50 | ug/L | 20.0 | | 90.1 | 50-150 | | | |
| 1,2-Dichloropropane | 18.0 | 0.40 | 0.50 | ug/L | 20.0 | | 90.2 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.0 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.3 | 0.40 | 0.50 | ug/L | 20.0 | | 91.4 | 50-150 | | | |
| Ethylbenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 60-140 | | | |
| Bromomethane | 16.4 | 0.40 | 0.50 | ug/L | 20.0 | | 81.8 | 15-185 | | | |
| Chloromethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 111 | 2-205 | | | |
| Methylene chloride | 19.2 | 0.50 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.5 | 0.30 | 0.50 | ug/L | 20.0 | | 97.3 | 60-140 | | | |
| Tetrachloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| Toluene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | | 93.6 | 70-130 | | | |
| 1,1,1-Trichloroethane | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 99.0 | 70-130 | | | |
| 1,1,2-Trichloroethane | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | | | |
| Trichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.7 | 65-135 | | | |
| Vinyl chloride | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.6 | 5-195 | | | |
| 1,2-Dichlorobenzene | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 65-135 | | | |
| 1,3-Dichlorobenzene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.5 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.0 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.9* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AC05007-BSD1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 120 | 60-140 | 0.672 | 25 | |
| Benzene | 20.9 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 65-135 | 4.66 | 25 | |
| Bromoform | 22.9 | 0.30 | 0.50 | ug/L | 20.0 | | 115 | 70-130 | 6.62 | 25 | |
| Carbon tetrachloride | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 4.66 | 25 | |
| Chlorobenzene | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 3.26 | 25 | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | | 121 | 70-135 | 7.17 | 25 | |
| Chloroethane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.6 | 40-160 | 2.37 | 25 | |
| Chloroform | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-135 | 4.04 | 25 | |
| Bromodichloromethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | 3.81 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.88 | 25 | |
| 1,2-Dichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.10 | 25 | |
| 1,1-Dichloroethene | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | | 96.7 | 50-150 | 7.07 | 25 | |
| 1,2-Dichloropropane | 18.6 | 0.40 | 0.50 | ug/L | 20.0 | | 92.8 | 35-165 | 2.90 | 25 | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 91.8 | 25-175 | 4.17 | 25 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.6 | 50-150 | 6.56 | 25 | |
| Ethylbenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 5.44 | 25 | |
| Bromomethane | 18.2 | 0.40 | 0.50 | ug/L | 20.0 | | 91.2 | 15-185 | 10.8 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 2-205 | 4.98 | 25 | |
| Methylene chloride | 19.7 | 0.50 | 0.50 | ug/L | 20.0 | | 98.5 | 60-140 | 2.62 | 25 | |
| 1,1,2,2-Tetrachloroethane | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | 4.57 | 25 | |
| Tetrachloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 3.68 | 25 | |
| Toluene | 21.6 | 0.30 | 0.30 | ug/L | 20.0 | | 108 | 70-130 | 5.52 | 25 | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | 3.41 | 25 | |
| 1,1,1-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | 8.60 | 25 | |
| 1,1,2-Trichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | 4.00 | 25 | |
| Trichloroethene | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 65-135 | 4.55 | 25 | |
| Vinyl chloride | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.6 | 5-195 | 3.16 | 25 | |
| 1,2-Dichlorobenzene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 65-135 | 3.81 | 25 | |
| 1,3-Dichlorobenzene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.4 | 70-130 | 4.04 | 25 | |
| 1,4-Dichlorobenzene | 20.1 | 0.10 | 0.50 | ug/L | 20.0 | | 100 | 65-135 | 0.150 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05007-MS1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | | | |
| Benzene | 22.2 | 0.30 | 0.30 | ug/L | 20.0 | ND | 111 | 37-151 | | | |
| Bromoform | 21.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 45-169 | | | |
| Carbon tetrachloride | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 70-140 | | | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 53-149 | | | |
| Chloroethane | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.6 | 14-230 | | | |
| Chloroform | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 51-138 | | | |
| Bromodichloromethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 35-155 | | | |
| 1,1-Dichloroethane | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 59-155 | | | |
| 1,2-Dichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 49-155 | | | |
| 1,1-Dichloroethene | 22.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.7 | 2-210 | | | |
| cis-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 91.8 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.2 | 17-183 | | | |
| Ethylbenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 37-162 | | | |
| Bromomethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 2-242 | | | |
| Chloromethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 2-273 | | | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.8 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.2 | 46-157 | | | |
| Tetrachloroethene | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | | | |
| Toluene | 22.6 | 0.30 | 0.30 | ug/L | 20.0 | ND | 113 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | | | |
| 1,1,1-Trichloroethane | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 52-150 | | | |
| Trichloroethene | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 70-157 | | | |
| Vinyl chloride | 22.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 2-251 | | | |
| 1,2-Dichlorobenzene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.0 | 0.10 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.6* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05007 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05007-MSD1)** | | **Source: 20C2261-02** | | | Prepared: 03/30/20 Analyzed: 03/31/20 | | | | | | |
| Acrylonitrile | 22.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 113 | 40-160 | 3.77 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 0.898 | 61 | |
| Bromoform | 23.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 117 | 45-169 | 7.64 | 42 | |
| Carbon tetrachloride | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 70-140 | 5.44 | 41 | |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0488 | 53 | |
| Dibromochloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 53-149 | 2.77 | 50 | |
| Chloroethane | 20.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 14-230 | 4.35 | 78 | |
| Chloroform | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 51-138 | 1.10 | 54 | |
| Bromodichloromethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 35-155 | 4.65 | 56 | |
| 1,1-Dichloroethane | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | 1.94 | 40 | |
| 1,2-Dichloroethane | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 49-155 | 2.11 | 49 | |
| 1,1-Dichloroethene | 21.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 2-234 | 1.37 | 32 | |
| 1,2-Dichloropropane | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.4 | 2-210 | 3.87 | 55 | |
| cis-1,3-Dichloropropene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.0 | 2-227 | 5.56 | 58 | |
| trans-1,3-Dichloropropene | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 17-183 | 3.44 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 4.37 | 63 | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 2-242 | 7.58 | 61 | |
| Chloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 2-273 | 0.502 | 60 | |
| Methylene chloride | 20.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 103 | 2-221 | 3.01 | 28 | |
| 1,1,2,2-Tetrachloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 46-157 | 2.05 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 0.446 | 39 | |
| Toluene | 23.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 115 | 47-150 | 1.97 | 41 | |
| trans-1,2-Dichloroethene | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 54-156 | 0.655 | 45 | |
| 1,1,1-Trichloroethane | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 52-162 | 1.41 | 36 | |
| 1,1,2-Trichloroethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 52-150 | 0.599 | 45 | |
| Trichloroethene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 70-157 | 1.94 | 48 | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | 6.33 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 1.88 | 57 | |
| 1,3-Dichlorobenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 59-156 | 3.18 | 43 | |
| 1,4-Dichlorobenzene | 21.4 | 0.10 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | 2.22 | 57 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.7* | | | *ug/L* | *25.0* | | *119* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05090-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 2.25 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05090-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *38.8* | | | *ug/L* | *40.0* | | *97.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *13.0* | | | *ug/L* | *40.0* | | *32.6* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.1* | | | *ug/L* | *40.0* | | *87.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.2* | | | *ug/L* | *40.0* | | *80.5* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.8* | | | *ug/L* | *40.0* | | *27.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *32.2* | | | *ug/L* | *40.0* | | *80.4* | *4-168* | | | |
| **LCS (AC05090-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 32.8 | 0.70 | 5.0 | ug/L | 40.0 | | 81.9 | 36-120 | | | |
| 2,4-Dichlorophenol | 34.2 | 0.70 | 5.0 | ug/L | 40.0 | | 85.6 | 53-122 | | | |
| 2,4-Dimethylphenol | 41.8 | 1.0 | 2.0 | ug/L | 50.0 | | 83.5 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 35.9 | 3.0 | 5.0 | ug/L | 40.0 | | 89.8 | 53-130 | | | |
| 2,4-Dinitrophenol | 55.3 | 5.0 | 5.0 | ug/L | 50.0 | | 111 | 10-173 | | | |
| 2-Nitrophenol | 38.9 | 0.90 | 10 | ug/L | 40.0 | | 97.2 | 45-167 | | | |
| 4-Nitrophenol | 18.2 | 3.0 | 10 | ug/L | 40.0 | | 45.6 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 48.3 | 1.0 | 1.0 | ug/L | 40.0 | | 121 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 33.9 | 0.60 | 5.0 | ug/L | 40.0 | | 84.8 | 36-102 | | | |
| Pentachlorophenol | 41.6 | 4.0 | 5.0 | ug/L | 40.0 | | 104 | 38-152 | | | |
| Phenol | 18.1 | 0.50 | 1.0 | ug/L | 40.0 | | 45.3 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 33.6 | 0.70 | 10 | ug/L | 40.0 | | 83.9 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 36.1 | 0.90 | 5.0 | ug/L | 40.0 | | 90.3 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 35.4 | 0.90 | 1.0 | ug/L | 40.0 | | 88.4 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 37.0 | 1.0 | 2.0 | ug/L | 40.0 | | 92.6 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 41.2 | 3.0 | 5.0 | ug/L | 40.0 | | 103 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 37.3 | 1.0 | 5.0 | ug/L | 40.0 | | 93.3 | 65-120 | | | |
| Butyl benzyl phthalate | 46.0 | 0.60 | 10 | ug/L | 40.0 | | 115 | 2-140 | | | |
| 2-Chloronaphthalene | 29.7 | 0.60 | 10 | ug/L | 40.0 | | 74.2 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 43.9 | 0.90 | 5.0 | ug/L | 40.0 | | 110 | 38-145 | | | |
| 1,2-Dichlorobenzene | 32.8 | 0.60 | 2.0 | ug/L | 40.0 | | 82.1 | 33-93 | | | |
| 1,3-Dichlorobenzene | 33.0 | 0.60 | 1.0 | ug/L | 40.0 | | 82.5 | 31-92 | | | |
| 1,4-Dichlorobenzene | 32.5 | 0.60 | 1.0 | ug/L | 40.0 | | 81.2 | 32-91 | | | |
| Diethyl phthalate | 35.4 | 0.30 | 2.0 | ug/L | 40.0 | | 88.6 | 2-120 | | | |
| Dimethyl phthalate | 39.4 | 0.80 | 2.0 | ug/L | 40.0 | | 98.5 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05090-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Di-n-butyl phthalate | 41.6 | 0.90 | 10 | ug/L | 40.0 | | 104 | 8-120 | | | |
| 2,4-Dinitrotoluene | 37.2 | 0.80 | 5.0 | ug/L | 40.0 | | 93.1 | 48-127 | | | |
| 2,6-Dinitrotoluene | 38.2 | 0.80 | 5.0 | ug/L | 40.0 | | 95.4 | 68-137 | | | |
| Di-n-octyl phthalate | 44.9 | 0.60 | 10 | ug/L | 40.0 | | 112 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 41.8 | 0.60 | 1.0 | ug/L | 40.0 | | 104 | 52-115 | | | |
| Hexachlorobenzene | 36.4 | 0.90 | 1.0 | ug/L | 40.0 | | 91.1 | 8-142 | | | |
| Hexachlorobutadiene | 30.9 | 0.80 | 1.0 | ug/L | 40.0 | | 77.3 | 38-120 | | | |
| Hexachlorocyclopentadiene | 15.5 | 4.0 | 5.0 | ug/L | 40.0 | | 38.6 | 16-93 | | | |
| Hexachloroethane | 30.8 | 0.60 | 1.0 | ug/L | 40.0 | | 77.0 | 55-120 | | | |
| Isophorone | 40.9 | 0.30 | 1.0 | ug/L | 40.0 | | 102 | 47-180 | | | |
| Nitrobenzene | 34.5 | 0.90 | 1.0 | ug/L | 40.0 | | 86.3 | 54-158 | | | |
| N-Nitrosodimethylamine | 21.6 | 0.30 | 5.0 | ug/L | 40.0 | | 54.1 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 43.4 | 0.80 | 5.0 | ug/L | 40.0 | | 108 | 14-198 | | | |
| N-Nitrosodiphenylamine | 43.3 | 1.0 | 1.0 | ug/L | 40.0 | | 108 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 30.6 | 0.60 | 5.0 | ug/L | 40.0 | | 76.5 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *38.1* | | | *ug/L* | *40.0* | | *95.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *25.0* | | | *ug/L* | *40.0* | | *62.6* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *41.4* | | | *ug/L* | *40.0* | | *103* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *45.5* | | | *ug/L* | *40.0* | | *114* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *19.0* | | | *ug/L* | *40.0* | | *47.5* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *47.1* | | | *ug/L* | *40.0* | | *118* | *4-168* | | | |
| **Matrix Spike (AC05090-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 10.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 26.4 | 23-134 | | | |
| 2,4-Dichlorophenol | 11.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 27.6 | 39-135 | | | QM-05 |
| 2,4-Dimethylphenol | 39.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 78.7 | 32-120 | | | |
| 4,6-Dinitro-2-methylphenol | 9.97 | 3.0 | 5.0 | ug/L | 40.0 | ND | 24.9 | 7-181 | | | |
| 2,4-Dinitrophenol | 15.6 | 5.0 | 5.0 | ug/L | 50.0 | ND | 31.1 | 10-191 | | | |
| 2-Nitrophenol | 10.2 | 0.90 | 10 | ug/L | 40.0 | ND | 25.4 | 29-182 | | | QM-05 |
| 4-Nitrophenol | 7.52 | 3.0 | 10 | ug/L | 40.0 | ND | 18.8 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 49.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 124 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 29.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 72.4 | 9-124 | | | |
| Pentachlorophenol | 10.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 27.4 | 14-176 | | | |
| Phenol | 11.7 | 0.50 | 1.0 | ug/L | 40.0 | ND | 29.3 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 7.68 | 0.70 | 10 | ug/L | 40.0 | ND | 19.2 | 37-144 | | | QM-05, J |
| Bis(2-chloroethoxy)methane | 32.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 82.3 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 32.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.3 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05090-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 32.3 | 1.0 | 2.0 | ug/L | 40.0 | ND | 80.8 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 31.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 79.1 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 36.0 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.0 | 53-127 | | | |
| Butyl benzyl phthalate | 27.7 | 0.60 | 10 | ug/L | 40.0 | ND | 69.2 | 2-152 | | | |
| 2-Chloronaphthalene | 26.5 | 0.60 | 10 | ug/L | 40.0 | ND | 66.3 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 43.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 109 | 25-158 | | | |
| 1,2-Dichlorobenzene | 29.4 | 0.60 | 2.0 | ug/L | 40.0 | ND | 73.6 | 7-104 | | | |
| 1,4-Dichlorobenzene | 29.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 73.6 | 3-105 | | | |
| 1,3-Dichlorobenzene | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.0 | 1-106 | | | |
| Diethyl phthalate | 22.6 | 0.30 | 2.0 | ug/L | 40.0 | 1.95 | 51.6 | 2-120 | | | |
| Dimethyl phthalate | 14.9 | 0.80 | 2.0 | ug/L | 40.0 | ND | 37.2 | 2-120 | | | |
| Di-n-butyl phthalate | 34.3 | 0.90 | 10 | ug/L | 40.0 | 3.31 | 77.5 | 1-120 | | | |
| 2,4-Dinitrotoluene | 38.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 97.2 | 39-139 | | | |
| 2,6-Dinitrotoluene | 37.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 93.9 | 50-158 | | | |
| Di-n-octyl phthalate | 39.4 | 0.60 | 10 | ug/L | 40.0 | ND | 98.4 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 35.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 88.7 | 39-116 | | | |
| Hexachlorobenzene | 35.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 89.0 | 2-152 | | | |
| Hexachlorobutadiene | 29.0 | 0.80 | 1.0 | ug/L | 40.0 | ND | 72.6 | 24-120 | | | |
| Hexachlorocyclopentadiene | 10.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 25.5 | 10-93 | | | |
| Hexachloroethane | 28.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 70.2 | 40-120 | | | |
| Isophorone | 38.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 95.2 | 21-196 | | | |
| Nitrobenzene | 32.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.8 | 35-180 | | | |
| N-Nitrosodimethylamine | 25.6 | 0.30 | 5.0 | ug/L | 40.0 | ND | 64.1 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 37.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 93.4 | 2-230 | | | |
| N-Nitrosodiphenylamine | 38.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 97.2 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 29.5 | 0.60 | 5.0 | ug/L | 40.0 | ND | 73.7 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.2* | | | *ug/L* | *40.0* | | *73.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *6.82* | | | *ug/L* | *40.0* | | *17.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.2* | | | *ug/L* | *40.0* | | *90.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.7* | | | *ug/L* | *40.0* | | *99.2* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.6* | | | *ug/L* | *40.0* | | *26.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *12.9* | | | *ug/L* | *40.0* | | *32.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05090-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 16.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 41.0 | 23-134 | 43.4 | 61 | |
| 2,4-Dichlorophenol | 17.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 42.4 | 39-135 | 42.4 | 50 | |
| 2,4-Dimethylphenol | 39.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 78.5 | 32-120 | 0.204 | 58 | |
| 4,6-Dinitro-2-methylphenol | 16.4 | 3.0 | 5.0 | ug/L | 40.0 | ND | 41.0 | 7-181 | 48.7 | 203 | |
| 2,4-Dinitrophenol | 21.1 | 5.0 | 5.0 | ug/L | 50.0 | ND | 42.2 | 10-191 | 30.2 | 132 | |
| 2-Nitrophenol | 20.0 | 0.90 | 10 | ug/L | 40.0 | ND | 50.1 | 29-182 | 65.5 | 55 | QM-08 |
| 4-Nitrophenol | 12.2 | 3.0 | 10 | ug/L | 40.0 | ND | 30.6 | 7-132 | 47.6 | 131 | |
| 4-Chloro-3-methylphenol | 32.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 81.2 | 22-147 | 41.7 | 73 | |
| Pentachlorophenol | 18.6 | 4.0 | 5.0 | ug/L | 40.0 | ND | 46.6 | 14-176 | 52.0 | 86 | |
| 2-Methylphenol (o-cresol) | 32.4 | 0.60 | 5.0 | ug/L | 40.0 | ND | 81.1 | 9-124 | 11.3 | 28 | |
| Phenol | 14.5 | 0.50 | 1.0 | ug/L | 40.0 | ND | 36.3 | 5-120 | 21.4 | 64 | |
| 2,4,6-Trichlorophenol | 17.8 | 0.70 | 10 | ug/L | 40.0 | ND | 44.5 | 37-144 | 79.5 | 58 | QM-08 |
| Bis(2-chloroethoxy)methane | 34.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 86.1 | 33-184 | 4.45 | 54 | |
| Bis(2-chloroethyl)ether | 33.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 83.0 | 12-158 | 2.04 | 108 | |
| Bis(2-chloroisopropyl)ether | 34.4 | 1.0 | 2.0 | ug/L | 40.0 | ND | 86.1 | 36-166 | 6.41 | 76 | |
| Bis(2-ethylhexyl)phthalate | 33.3 | 3.0 | 5.0 | ug/L | 40.0 | ND | 83.3 | 8-158 | 5.14 | 82 | |
| 4-Bromophenyl phenyl ether | 36.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.3 | 53-127 | 0.333 | 43 | |
| Butyl benzyl phthalate | 9.60 | 0.60 | 10 | ug/L | 40.0 | ND | 24.0 | 2-152 | 97.0 | 60 | QM-08, J |
| 2-Chloronaphthalene | 32.5 | 0.60 | 10 | ug/L | 40.0 | ND | 81.3 | 60-120 | 20.3 | 24 | |
| 4-Chlorophenyl phenyl ether | 35.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 87.6 | 25-158 | 22.0 | 61 | |
| 1,4-Dichlorobenzene | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.1 | 3-105 | 0.711 | 42 | |
| 1,3-Dichlorobenzene | 29.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.8 | 1-106 | 1.01 | 41 | |
| 1,2-Dichlorobenzene | 29.9 | 0.60 | 2.0 | ug/L | 40.0 | ND | 74.7 | 7-104 | 1.52 | 41 | |
| Diethyl phthalate | 7.36 | 0.30 | 2.0 | ug/L | 40.0 | 1.95 | 13.5 | 2-120 | 102 | 100 | QM-08 |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | 200 | 183 | QM-05, QM-08, U |
| Di-n-butyl phthalate | 25.3 | 0.90 | 10 | ug/L | 40.0 | 3.31 | 55.1 | 1-120 | 30.0 | 47 | |
| 2,4-Dinitrotoluene | 27.5 | 0.80 | 5.0 | ug/L | 40.0 | ND | 68.7 | 39-139 | 34.3 | 42 | |
| 2,6-Dinitrotoluene | 30.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 75.2 | 50-158 | 22.1 | 48 | |
| Di-n-octyl phthalate | 7.82 | 0.60 | 10 | ug/L | 40.0 | ND | 19.6 | 4-146 | 134 | 69 | QM-08, J |
| 1,2-Diphenylhydrazine | 39.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 97.6 | 39-116 | 9.56 | 25 | |
| Hexachlorobenzene | 33.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 84.8 | 2-152 | 4.86 | 55 | |
| Hexachlorobutadiene | 29.0 | 0.80 | 1.0 | ug/L | 40.0 | ND | 72.4 | 24-120 | 0.207 | 62 | |
| Hexachlorocyclopentadiene | 12.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 32.4 | 10-93 | 23.7 | 55 | |
| Hexachloroethane | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.1 | 40-120 | 5.44 | 52 | |
| Isophorone | 37.7 | 0.30 | 1.0 | ug/L | 40.0 | ND | 94.3 | 21-196 | 1.03 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05090-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Nitrobenzene | 33.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 82.8 | 35-180 | 1.12 | 62 | |
| N-Nitrosodimethylamine | 21.9 | 0.30 | 5.0 | ug/L | 40.0 | ND | 54.7 | 10-84 | 15.8 | 59 | |
| N-Nitrosodi-n-propylamine | 39.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 98.4 | 2-230 | 5.24 | 87 | |
| N-Nitrosodiphenylamine | 40.8 | 1.0 | 1.0 | ug/L | 40.0 | ND | 102 | 40-115 | 4.90 | 25 | |
| 1,2,4-Trichlorobenzene | 29.2 | 0.60 | 5.0 | ug/L | 40.0 | ND | 72.9 | 44-142 | 1.13 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *36.9* | | | *ug/L* | *40.0* | | *92.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *11.7* | | | *ug/L* | *40.0* | | *29.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.0* | | | *ug/L* | *40.0* | | *89.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *34.5* | | | *ug/L* | *40.0* | | *86.3* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *13.7* | | | *ug/L* | *40.0* | | *34.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *25.3* | | | *ug/L* | *40.0* | | *63.2* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03025 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03025-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *36.4* | | | *ug/L* | *40.0* | | *90.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.5* | | | *ug/L* | *40.0* | | *93.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.0* | | | *ug/L* | *40.0* | | *99.9* | *36-141* | | | |
| **LCS (AD03025-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 24.6 | 3.00 | 5.00 | ug/L | 79.4 | | 31.0 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 82.0 | 2.00 | 5.00 | ug/L | 79.4 | | 103 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *36.8* | | | *ug/L* | *40.0* | | *91.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.8* | | | *ug/L* | *40.0* | | *94.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.3* | | | *ug/L* | *40.0* | | *101* | *36-141* | | | |
| **Matrix Spike (AD03025-MS1)** | | **Source: 20C3406-01** | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 46.1 | 3.00 | 5.00 | ug/L | 79.4 | ND | 58.1 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 79.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 100 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.6* | | | *ug/L* | *40.0* | | *91.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.8* | | | *ug/L* | *40.0* | | *96.9* | *36-141* | | | |
| **Matrix Spike Dup (AD03025-MSD1)** | | **Source: 20C3406-01** | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 63.4 | 3.00 | 5.00 | ug/L | 79.4 | ND | 79.8 | 4-262 | 31.5 | 108 | |
| 3,3´-Dichlorobenzidine | 83.1 | 2.00 | 5.00 | ug/L | 79.4 | ND | 105 | 4-262 | 4.31 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.8* | | | *ug/L* | *40.0* | | *94.4* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.5* | | | *ug/L* | *40.0* | | *98.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.8* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD04124-BLK1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *24.9* | | | *ug/L* | *40.0* | | *62.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.9* | | | *ug/L* | *40.0* | | *72.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.0* | | | *ug/L* | *40.0* | | *75.0* | *37-139* | | | |
| **LCS (AD04124-BS1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 35.6 | 0.20 | 0.20 | ug/L | 40.0 | | 88.9 | 60-132 | | | |
| Acenaphthylene | 37.2 | 0.20 | 0.20 | ug/L | 40.0 | | 93.1 | 54-126 | | | |
| Anthracene | 34.3 | 0.090 | 0.20 | ug/L | 40.0 | | 85.7 | 43-120 | | | |
| Benzo (a) anthracene | 36.5 | 0.20 | 0.20 | ug/L | 40.0 | | 91.2 | 42-133 | | | |
| Benzo (a) pyrene | 39.7 | 0.20 | 0.20 | ug/L | 40.0 | | 99.2 | 32-148 | | | |
| Benzo (b) fluoranthene | 38.0 | 0.20 | 0.20 | ug/L | 40.0 | | 94.9 | 42-140 | | | |
| Benzo (g,h,i) perylene | 37.2 | 0.10 | 0.20 | ug/L | 40.0 | | 93.1 | 2-195 | | | |
| Benzo (k) fluoranthene | 37.1 | 0.20 | 0.20 | ug/L | 40.0 | | 92.8 | 25-146 | | | |
| Chrysene | 37.9 | 0.20 | 0.20 | ug/L | 40.0 | | 94.7 | 44-140 | | | |
| Dibenz (a,h) anthracene | 35.7 | 0.10 | 0.20 | ug/L | 40.0 | | 89.3 | 2-200 | | | |
| Fluoranthene | 27.9 | 0.070 | 0.20 | ug/L | 40.0 | | 69.6 | 43-121 | | | |
| Fluorene | 29.7 | 0.20 | 0.20 | ug/L | 40.0 | | 74.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 35.7 | 0.030 | 0.20 | ug/L | 40.0 | | 89.3 | 2-151 | | | |
| Naphthalene | 35.1 | 0.090 | 0.20 | ug/L | 40.0 | | 87.7 | 36-120 | | | |
| Phenanthrene | 31.9 | 0.10 | 0.20 | ug/L | 40.0 | | 79.8 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD04124-BS1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Pyrene | 41.4 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.7* | | | *ug/L* | *40.0* | | *86.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.5* | | | *ug/L* | *40.0* | | *86.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *48.0* | | | *ug/L* | *40.0* | | *120* | *37-139* | | | |
| **Matrix Spike (AD04124-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 18.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 45.0 | 47-145 | | | QM-05 |
| Acenaphthylene | 18.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 47.1 | 33-145 | | | |
| Anthracene | 28.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 71.8 | 27-133 | | | |
| Benzo (a) anthracene | 32.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 80.4 | 33-143 | | | |
| Benzo (a) pyrene | 49.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 123 | 17-163 | | | |
| Benzo (b) fluoranthene | 47.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 119 | 24-159 | | | |
| Benzo (g,h,i) perylene | 52.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 131 | 2-219 | | | |
| Benzo (k) fluoranthene | 46.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 116 | 11-162 | | | |
| Chrysene | 36.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.0 | 17-168 | | | |
| Dibenz (a,h) anthracene | 50.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 126 | 2-227 | | | |
| Fluoranthene | 23.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 59.0 | 26-137 | | | |
| Fluorene | 13.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 34.3 | 59-121 | | | QM-05 |
| Indeno (1,2,3-cd) pyrene | 49.6 | 0.030 | 0.20 | ug/L | 40.0 | ND | 124 | 2-171 | | | |
| Naphthalene | 34.6 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.6 | 21-133 | | | |
| Phenanthrene | 20.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 50.8 | 54-120 | | | QM-05 |
| Pyrene | 31.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.4 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *22.3* | | | *ug/L* | *40.0* | | *55.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.8* | | | *ug/L* | *40.0* | | *96.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.9* | | | *ug/L* | *40.0* | | *82.4* | *37-139* | | | |
| **Matrix Spike Dup (AD04124-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 35.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.7 | 47-145 | 66.3 | 48 | QM-08 |
| Acenaphthylene | 38.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.0 | 33-145 | 68.4 | 74 | |
| Anthracene | 34.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 84.9 | 27-133 | 16.8 | 66 | |
| Benzo (a) anthracene | 30.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.8 | 33-143 | 4.67 | 53 | |
| Benzo (a) pyrene | 32.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.1 | 17-163 | 39.9 | 72 | |
| Benzo (b) fluoranthene | 34.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 85.4 | 24-159 | 32.6 | 71 | |
| Benzo (g,h,i) perylene | 32.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 81.6 | 2-219 | 46.4 | 97 | |
| Benzo (k) fluoranthene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.4 | 11-162 | 34.8 | 63 | |
| Chrysene | 32.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.3 | 17-168 | 12.4 | 87 | |
| Dibenz (a,h) anthracene | 30.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 76.7 | 2-227 | 48.4 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:06 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD04124-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Fluoranthene | 24.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 61.6 | 26-137 | 4.15 | 66 | |
| Fluorene | 35.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.7 | 59-121 | 89.3 | 38 | QM-08 |
| Indeno (1,2,3-cd) pyrene | 31.2 | 0.030 | 0.20 | ug/L | 40.0 | ND | 77.9 | 2-171 | 45.7 | 99 | |
| Naphthalene | 38.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 94.9 | 21-133 | 9.12 | 65 | |
| Phenanthrene | 21.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 53.2 | 54-120 | 4.56 | 39 | QM-05 |
| Pyrene | 38.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.3 | 52-120 | 20.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *31.1* | | | *ug/L* | *40.0* | | *77.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.8* | | | *ug/L* | *40.0* | | *84.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.0* | | | *ug/L* | *40.0* | | *97.6* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:06 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
9[illegible]-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 2003406



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | **PO#** |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: David Walter / David C Walt

1.7 °C ukiah

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | 3-26-20 | 1045 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |

Sample Notes

TAT: 24 hr ○ 48 hr ○ Lab Approval Required ○ 1 wk ○ 2 wk (standard) ⊘ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/26/20 | 1556 |
| [signature] | PZH | 3/26/20 | 17:22 |
| PZH | PZH | 3-26-20 | 26:25 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (x) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

**WORK ORDER**



**20C3406**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 04/10/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/26/20 21:11

Logged In By: Leslie M. Quinn — Date Logged In: 03/26/20 20:11

Samples Received at: 1.7 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C3406-01 BKGD-1 [Water] Sampled 03/26/20 10:45 (GMT-08:00) Pacific Time** | | | | |
| BAL Hg 1631 | BAL Metals | 04/23/20 10:45 | | |
| **20C3406-01 BKGD-1 [Water] Sampled 03/26/20 10:45 (GMT-08:00) Pacific Time** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/23/20 10:45 | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By | 3.27.20 | | Received By | 3-30-20 14:00 |
| | Date | Time | | Date Time |
| Relinquished By | 3-30-20 | 18:20 | Received By | 03/31/20 1100 |
| | Date | Time | | Date Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

22 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C3407

Enclosed are the results of analyses for samples received by the laboratory on 03/26/20 20:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:05 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-9 | 20C3407-01 | Water | 03/26/20 13:35 | 03/26/20 20:25 |
| Blank - Ground Water | 20C3407-02 | Water | 03/26/20 00:00 | 03/26/20 20:25 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AD03309 | 04/07/20 17:01 | 04/07/20 17:01 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:35 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **6.9** | **3.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:35 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **1.3** | **0.60** | **4.0** | **ug/L** | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:15 | EPA 200.8 | MB | 1551 | R-01, J |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:15 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:36 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AC04990 | 03/30/20 15:52 | 03/30/20 15:52 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **4.8** | **3.0** | **5.0** | **ug/L** | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | J |
| **Selenium, dissolved** | **1.1** | **0.60** | **4.0** | **ug/L** | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:45 | EPA 200.8 | SMP | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AC05014 | 03/30/20 16:05 | 04/01/20 20:45 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AC05014 | 03/30/20 16:05 | 04/01/20 20:02 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| **Mercury** | **13.8** | **0.200** | **0.500** | **ng/l** | 1 | AD03331 | 04/08/20 16:00 | 04/09/20 17:33 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water** | **Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | |
| **Mercury, dissolved** | **3.92** | **0.200** | **0.500** | **ng/l** | 1 | AD04058 | 04/15/20 16:00 | 04/16/20 14:56 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03344 | 04/07/20 08:00 | 04/07/20 14:43 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AC05092 | 03/31/20 13:31 | 04/09/20 03:10 | 8015DRO | NBH | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AC05092 | 03/31/20 13:31 | 04/09/20 03:10 | 8015DRO | NBH | 1551 | U |
| *Surrogate: Tetratetracontane* | | *79.6 %* | *39-120* | | | *AC05092* | *03/31/20 13:31* | *04/09/20 03:10* | *8015DRO* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03039 | 04/01/20 08:30 | 04/01/20 22:37 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *96.7 %* | *76-129* | | | *AD03039* | *04/01/20 08:30* | *04/01/20 22:37* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 10:35 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C3407-02) Water Sampled: 03/26/20 00:00 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 11:10 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *106 %* | *70-130* | | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 10:35 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *111 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *109 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *101 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 10:35* | *EPA 624.1* | *JV* | 1551 | |
| **Blank - Ground Water (20C3407-02) Water Sampled: 03/26/20 00:00 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AC04751 | 03/26/20 16:00 | 03/27/20 11:10 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *105 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *106 %* | | *70-130* | | *AC04751* | *03/26/20 16:00* | *03/27/20 11:10* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 22:37 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *114 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 22:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *119 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 22:37* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 22:37* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C3407-02) Water Sampled: 03/26/20 00:00 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03040 | 04/01/20 08:00 | 04/01/20 23:11 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *110 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 23:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *111 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 23:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AD03040* | *04/01/20 08:00* | *04/01/20 23:11* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.4** | **0.90** | **10** | **ug/L** | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AC05090 | 04/01/20 08:00 | 04/16/20 03:20 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *94.4 %* | *27-119* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *70.1 %* | *7-85* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *105 %* | *15-314* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *109 %* | *36-141* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *42.0 %* | *1-65* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *124 %* | *4-168* | | | *AC05090* | *04/01/20 08:00* | *04/16/20 03:20* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AD03025 | 04/01/20 07:35 | 04/08/20 20:05 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AD03025 | 04/01/20 07:35 | 04/08/20 20:05 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *97.2 %* | *27-119* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 20:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *104 %* | *15-314* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 20:05* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *113 %* | *36-141* | | | *AD03025* | *04/01/20 07:35* | *04/08/20 20:05* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-9 (20C3407-01) Water Sampled: 03/26/20 13:35 Received: 03/26/20 20:25** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04124 | 04/01/20 08:00 | 04/20/20 18:23 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *83.6 %* | *24-119* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 18:23* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *83.8 %* | *15-314* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 18:23* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *116 %* | *37-139* | | | *AD04124* | *04/01/20 08:00* | *04/20/20 18:23* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03309 - General Prep** | | | | | | | | | | | |
| **Blank (AD03309-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03309-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AD03309-DUP1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03309-MS1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.96 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.6 | 90-110 | | | |
| **Matrix Spike Dup (AD03309-MSD1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 0.100 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AD03199-BLK1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03199-BS1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 21.2 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 21.0 | 0.060 | 0.25 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Nickel | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Zinc | 103 | 4.0 | 5.0 | ug/L | 100 | | 103 | 85-115 | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 1.27 | 0.80 | 2.0 | ug/L | | 1.28 | | | 0.788 | 20 | R-01, J |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.9 | 1.6 | 2.0 | ug/L | | 10.8 | | | 0.103 | 20 | |
| Lead | 1.44 | 0.24 | 1.0 | ug/L | | 1.38 | | | 3.92 | 20 | |
| Nickel | 1.65 | 1.2 | 2.0 | ug/L | | 1.78 | | | 7.60 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Silver | 0.389 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 96.5 | 16 | 20 | ug/L | | 96.0 | | | 0.490 | 20 | |
| **Matrix Spike (AD03199-MS1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.4 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 106 | 70-130 | | | |
| Arsenic | 21.0 | 1.6 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium | 23.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Copper | 34.2 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 117 | 70-130 | | | |
| Lead | 22.7 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 107 | 70-130 | | | |
| Nickel | 23.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 108 | 70-130 | | | |
| Selenium | 20.0 | 1.2 | 8.0 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 199 | 16 | 20 | ug/L | 100 | 96.0 | 103 | 70-130 | | | |
| **Matrix Spike (AD03199-MS2)** | | **Source: 20C3319-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | 0.977 | 99.5 | 70-130 | | | |
| Arsenic | 22.0 | 1.6 | 2.0 | ug/L | 20.0 | 1.91 | 100 | 70-130 | | | |
| Beryllium | 20.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 28.0 | 2.0 | 2.0 | ug/L | 20.0 | 4.72 | 116 | 70-130 | | | |
| Copper | 33.8 | 1.6 | 2.0 | ug/L | 20.0 | 13.8 | 99.9 | 70-130 | | | |
| Lead | 24.6 | 0.24 | 1.0 | ug/L | 20.0 | 3.41 | 106 | 70-130 | | | |
| Nickel | 29.4 | 1.2 | 2.0 | ug/L | 20.0 | 6.54 | 114 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 21.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc | 147 | 16 | 20 | ug/L | 100 | 48.9 | 98.2 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03199-MSD1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.3 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 105 | 70-130 | 0.276 | 20 | |
| Arsenic | 21.8 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.79 | 20 | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 0.171 | 20 | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 1.89 | 20 | |
| Chromium | 24.5 | 2.0 | 2.0 | ug/L | 20.0 | ND | 123 | 70-130 | 5.23 | 20 | |
| Copper | 31.8 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 105 | 70-130 | 7.37 | 20 | |
| Lead | 22.9 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 108 | 70-130 | 0.841 | 20 | |
| Nickel | 24.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 113 | 70-130 | 4.16 | 20 | |
| Selenium | 20.2 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.861 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 1.63 | 20 | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | 2.11 | 20 | |
| Zinc | 197 | 16 | 20 | ug/L | 100 | 96.0 | 101 | 70-130 | 0.940 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04990 - General Prep** | | | | | | | | | | | |
| **Blank (AC04990-BLK1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AC04990-BS1)** | | | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AC04990-DUP1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC04990-MS1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.68 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.8 | 90-110 | | | |
| **Matrix Spike Dup (AC04990-MSD1)** | | **Source: 20C3407-01** | | | Prepared & Analyzed: 03/30/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 2.87 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05014 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AC05014-BLK1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0905 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AC05014-BS1)** | | | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 20.6 | 0.20 | 0.50 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Arsenic, dissolved | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Beryllium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Cadmium, dissolved | 20.2 | 0.060 | 0.10 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Chromium, dissolved | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.8 | 85-115 | | | |
| Copper, dissolved | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead, dissolved | 20.3 | 0.060 | 0.25 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Nickel, dissolved | 19.6 | 0.30 | 0.50 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Selenium, dissolved | 19.4 | 0.30 | 2.0 | ug/L | 20.0 | | 97.0 | 85-115 | | | |
| Silver, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Thallium, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 99.6 | 4.0 | 5.0 | ug/L | 100 | | 99.6 | 85-115 | | | |
| **Duplicate (AC05014-DUP1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | ND | | | | 20 | U |
| Arsenic, dissolved | 0.941 | 0.40 | 0.50 | ug/L | | 1.09 | | | 14.9 | 20 | |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper, dissolved | 0.560 | 0.40 | 0.50 | ug/L | | 0.547 | | | 2.25 | 20 | |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | ND | | | | 20 | U |
| Nickel, dissolved | 6.44 | 0.30 | 0.50 | ug/L | | 6.51 | | | 1.10 | 20 | |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05014 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AC05014-DUP1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/02/20 | | | | | | |
| Silver, dissolved | 0.0546 | 0.050 | 0.10 | ug/L | | ND | | | 200 | 20 | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AC05014-MS1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 21.9 | 0.20 | 0.50 | ug/L | 20.0 | ND | 109 | 70-130 | | | |
| Arsenic, dissolved | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | 1.09 | 106 | 70-130 | | | |
| Beryllium, dissolved | 20.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Cadmium, dissolved | 20.8 | 0.060 | 0.10 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium, dissolved | 19.9 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.5 | 70-130 | | | |
| Copper, dissolved | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | 0.547 | 100 | 70-130 | | | |
| Lead, dissolved | 19.7 | 0.060 | 0.25 | ug/L | 20.0 | ND | 98.7 | 70-130 | | | |
| Nickel, dissolved | 24.7 | 0.30 | 0.50 | ug/L | 20.0 | 6.51 | 91.1 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Thallium, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 99.7 | 70-130 | | | |
| Zinc, dissolved | 99.1 | 4.0 | 5.0 | ug/L | 100 | ND | 99.1 | 70-130 | | | |
| **Matrix Spike Dup (AC05014-MSD1)** | | **Source: 20C3469-01** | | | Prepared: 03/30/20 Analyzed: 04/01/20 | | | | | | |
| Antimony, dissolved | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | 1.30 | 20 | |
| Arsenic, dissolved | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | 1.09 | 104 | 70-130 | 2.00 | 20 | |
| Beryllium, dissolved | 20.0 | 0.050 | 0.10 | ug/L | 20.0 | ND | 100 | 70-130 | 1.14 | 20 | |
| Cadmium, dissolved | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 2.44 | 20 | |
| Chromium, dissolved | 19.4 | 0.50 | 0.50 | ug/L | 20.0 | ND | 97.0 | 70-130 | 2.54 | 20 | |
| Copper, dissolved | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | 0.547 | 99.6 | 70-130 | 0.665 | 20 | |
| Lead, dissolved | 19.5 | 0.060 | 0.25 | ug/L | 20.0 | ND | 97.4 | 70-130 | 1.32 | 20 | |
| Nickel, dissolved | 24.0 | 0.30 | 0.50 | ug/L | 20.0 | 6.51 | 87.2 | 70-130 | 3.23 | 20 | |
| Selenium, dissolved | 19.9 | 0.30 | 2.0 | ug/L | 20.0 | ND | 99.7 | 70-130 | 1.18 | 20 | |
| Silver, dissolved | 19.8 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.9 | 70-130 | 2.67 | 20 | |
| Thallium, dissolved | 19.7 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.4 | 70-130 | 1.28 | 20 | |
| Zinc, dissolved | 97.6 | 4.0 | 5.0 | ug/L | 100 | ND | 97.6 | 70-130 | 1.56 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03331 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03331-BLK1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03331-BS1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 4.67 | 0.200 | 0.500 | ng/l | 5.00 | | 93.4 | 77-123 | | | |
| **Matrix Spike (AD03331-MS1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 29.0 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 88.0 | 71-125 | | | |
| **Matrix Spike (AD03331-MS2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 27.4 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 105 | 71-125 | | | |
| **Matrix Spike Dup (AD03331-MSD1)** | | **Source: 20C2511-02** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 28.8 | 0.200 | 0.500 | ng/l | 25.0 | 7.01 | 87.2 | 71-125 | 0.726 | 24 | |
| **Matrix Spike Dup (AD03331-MSD2)** | | **Source: 20C2950-01** | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 26.0 | 0.200 | 0.500 | ng/l | 25.0 | 1.25 | 99.1 | 71-125 | 5.13 | 24 | |
| **Reference (AD03331-SRM1)** | | | | | Prepared: 04/08/20 Analyzed: 04/09/20 | | | | | | |
| Mercury | 46.3 | 0.200 | 0.500 | ng/l | 50.0 | | 92.7 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD04058-BLK1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD04058-BS1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 4.62 | 0.200 | 0.500 | ng/l | 5.00 | | 92.4 | 77-123 | | | |
| **Matrix Spike (AD04058-MS1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 96.6 | 71-125 | | | |
| **Matrix Spike Dup (AD04058-MSD1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.7 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 97.8 | 71-125 | 1.22 | 24 | |
| **Reference (AD04058-SRM1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 43.2 | 0.200 | 0.500 | ng/l | 50.0 | | 86.4 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03344 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03344-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03344-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.197 | 0.0020 | 0.0030 | mg/L | 0.200 | | 98.6 | 85-115 | | | |
| **Duplicate (AD03344-DUP1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03344-MS1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.166 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 82.9 | 85-115 | | | QM-05 |
| **Matrix Spike (AD03344-MS2)** | | **Source: 20C3401-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.221 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |
| **Matrix Spike Dup (AD03344-MSD1)** | | **Source: 20C3267-05** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Cyanide (total) | 0.212 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 106 | 85-115 | 24.6 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05092 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AC05092-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *50.8* | | | *ug/L* | *57.4* | | *88.5* | *39-120* | | | |
| **LCS (AC05092-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | 2190 | 50 | 250 | ug/L | 2100 | | 104 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *55.3* | | | *ug/L* | *57.4* | | *96.3* | *39-120* | | | |
| **LCS (AC05092-BS2)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Motor Oil | 1490 | 100 | 250 | ug/L | 2010 | | 74.0 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *55.1* | | | *ug/L* | *57.4* | | *96.0* | *39-120* | | | |
| **LCS Dup (AC05092-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Diesel | 2060 | 50 | 250 | ug/L | 2100 | | 98.1 | 61-120 | 6.30 | 25 | |
| *Surrogate: Tetratetracontane* | *39.4* | | | *ug/L* | *57.4* | | *68.7* | *39-120* | | | |
| **LCS Dup (AC05092-BSD2)** | | | | | Prepared: 03/31/20 Analyzed: 04/08/20 | | | | | | |
| TPH as Motor Oil | 1460 | 100 | 250 | ug/L | 2010 | | 72.7 | 71-125 | 1.65 | 25 | |
| *Surrogate: Tetratetracontane* | *53.7* | | | *ug/L* | *57.4* | | *93.6* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03039 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03039-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *76-129* | | | |
| **LCS (AD03039-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 144 | 50 | 50 | ug/L | 200 | | 72.0 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *25.4* | | | *ug/L* | *25.0* | | *101* | *76-129* | | | |
| **LCS Dup (AD03039-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 147 | 50 | 50 | ug/L | 200 | | 73.6 | 67-132 | 2.11 | 25 | |
| *Surrogate: Toluene-d8* | *25.1* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |
| **Matrix Spike (AD03039-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 147 | 50 | 50 | ug/L | 200 | ND | 73.5 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *24.9* | | | *ug/L* | *25.0* | | *99.8* | *76-129* | | | |
| **Matrix Spike Dup (AD03039-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| TPH as Gasoline | 143 | 50 | 50 | ug/L | 200 | ND | 71.4 | 37-156 | 2.88 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *100* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 53.1 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| Acrolein | 47.0 | 2.0 | 5.0 | ug/L | 50.0 | | 94.1 | 60-140 | 12.0 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 56.0 | 2.0 | 5.0 | ug/L | 50.0 | ND | 112 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| Acrolein | 54.7 | 2.0 | 5.0 | ug/L | 50.0 | ND | 109 | 40-160 | 2.35 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC04751 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC04751-BLK1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *27.7* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.2* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *70-130* | | | |
| **LCS (AC04751-BS1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.4 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.9* | | | *ug/L* | *25.0* | | *112* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.8* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.7* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS Dup (AC04751-BSD1)** | | | | | Prepared & Analyzed: 03/26/20 | | | | | | |
| 2-Chloroethylvinyl ether | 24.4 | 0.70 | 1.0 | ug/L | 25.0 | | 97.8 | 3-225 | 0.369 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.9* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| **Matrix Spike (AC04751-MS1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 26.3 | 0.70 | 1.0 | ug/L | 25.0 | ND | 105 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *26.0* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.3* | | | *ug/L* | *25.0* | | *105* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.5* | *70-130* | | | |
| **Matrix Spike Dup (AC04751-MSD1)** | | **Source: 20C3138-01** | | | Prepared: 03/26/20 Analyzed: 03/27/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.4 | 0.70 | 1.0 | ug/L | 25.0 | ND | 102 | 3-305 | 3.25 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *24.2* | | | *ug/L* | *25.0* | | *96.9* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03040-BLK1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *28.2* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.9* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *29.4* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03040-BS1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | 23.9 | 0.40 | 2.0 | ug/L | 20.0 | | 119 | 60-140 | | | |
| Benzene | 19.8 | 0.30 | 0.30 | ug/L | 20.0 | | 99.2 | 65-135 | | | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | | | |
| Carbon tetrachloride | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Chlorobenzene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.1 | 65-135 | | | |
| Dibromochloromethane | 22.6 | 0.40 | 0.50 | ug/L | 20.0 | | 113 | 70-135 | | | |
| Chloroethane | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 88.2 | 40-160 | | | |
| Chloroform | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 107 | 70-135 | | | |
| Bromodichloromethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 65-135 | | | |
| 1,1-Dichloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 97.2 | 70-130 | | | |
| 1,2-Dichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,1-Dichloroethene | 18.9 | 0.30 | 0.50 | ug/L | 20.0 | | 94.4 | 50-150 | | | |
| 1,2-Dichloropropane | 17.9 | 0.40 | 0.50 | ug/L | 20.0 | | 89.4 | 35-165 | | | |
| cis-1,3-Dichloropropene | 17.6 | 0.40 | 0.50 | ug/L | 20.0 | | 87.8 | 25-175 | | | |
| trans-1,3-Dichloropropene | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | | 94.0 | 50-150 | | | |
| Ethylbenzene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.2 | 60-140 | | | |
| Bromomethane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 95.1 | 15-185 | | | |
| Chloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 2-205 | | | |
| Methylene chloride | 19.4 | 0.50 | 0.50 | ug/L | 20.0 | | 97.0 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 20.3 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 60-140 | | | |
| Tetrachloroethene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 97.8 | 70-130 | | | |
| Toluene | 21.0 | 0.30 | 0.30 | ug/L | 20.0 | | 105 | 70-130 | | | |
| trans-1,2-Dichloroethene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | | 94.4 | 70-130 | | | |
| 1,1,1-Trichloroethane | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 70-130 | | | |
| Trichloroethene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Vinyl chloride | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 5-195 | | | |
| 1,2-Dichlorobenzene | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| 1,3-Dichlorobenzene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | | 98.8 | 70-130 | | | |
| 1,4-Dichlorobenzene | 20.4 | 0.10 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *29.3* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.4* | | | *ug/L* | *25.0* | | *114* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AD03040-BSD1)** | | | | | Prepared: 03/31/20 Analyzed: 04/01/20 | | | | | | |
| Acrylonitrile | 22.2 | 0.40 | 2.0 | ug/L | 20.0 | | 111 | 60-140 | 7.12 | 25 | |
| Benzene | 20.4 | 0.30 | 0.30 | ug/L | 20.0 | | 102 | 65-135 | 2.63 | 25 | |
| Bromoform | 23.1 | 0.30 | 0.50 | ug/L | 20.0 | | 116 | 70-130 | 0.216 | 25 | |
| Carbon tetrachloride | 21.9 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 1.47 | 25 | |
| Chlorobenzene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.0 | 65-135 | 0.104 | 25 | |
| Dibromochloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-135 | 4.70 | 25 | |
| Chloroethane | 17.2 | 0.40 | 0.50 | ug/L | 20.0 | | 85.8 | 40-160 | 2.87 | 25 | |
| Chloroform | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-135 | 0.232 | 25 | |
| Bromodichloromethane | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 65-135 | 2.05 | 25 | |
| 1,1-Dichloroethane | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | | 100 | 70-130 | 3.14 | 25 | |
| 1,2-Dichloroethane | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | 0.717 | 25 | |
| 1,1-Dichloroethene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 95.8 | 50-150 | 1.53 | 25 | |
| 1,2-Dichloropropane | 18.8 | 0.40 | 0.50 | ug/L | 20.0 | | 94.0 | 35-165 | 5.01 | 25 | |
| cis-1,3-Dichloropropene | 17.4 | 0.40 | 0.50 | ug/L | 20.0 | | 87.2 | 25-175 | 0.743 | 25 | |
| trans-1,3-Dichloropropene | 18.4 | 0.40 | 0.50 | ug/L | 20.0 | | 92.1 | 50-150 | 2.10 | 25 | |
| Ethylbenzene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | | 97.4 | 60-140 | 0.767 | 25 | |
| Bromomethane | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | | 89.0 | 15-185 | 6.68 | 25 | |
| Chloromethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 117 | 2-205 | 1.53 | 25 | |
| Methylene chloride | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.8 | 60-140 | 2.90 | 25 | |
| 1,1,2,2-Tetrachloroethane | 19.4 | 0.30 | 0.50 | ug/L | 20.0 | | 96.8 | 60-140 | 4.84 | 25 | |
| Tetrachloroethene | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | | 98.6 | 70-130 | 0.764 | 25 | |
| Toluene | 20.8 | 0.30 | 0.30 | ug/L | 20.0 | | 104 | 70-130 | 0.909 | 25 | |
| trans-1,2-Dichloroethene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 99.8 | 70-130 | 5.61 | 25 | |
| 1,1,1-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 70-130 | 4.42 | 25 | |
| 1,1,2-Trichloroethane | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 4.67 | 25 | |
| Trichloroethene | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.1 | 65-135 | 1.90 | 25 | |
| Vinyl chloride | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 5-195 | 1.66 | 25 | |
| 1,2-Dichlorobenzene | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | | 94.8 | 65-135 | 1.47 | 25 | |
| 1,3-Dichlorobenzene | 19.1 | 0.40 | 0.50 | ug/L | 20.0 | | 95.4 | 70-130 | 3.55 | 25 | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 98.8 | 65-135 | 3.09 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.6* | | | *ug/L* | *25.0* | | *118* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03040-MS1)** | | **Source: 20C3138-02** | | | Prepared: 03/31/20 Analyzed: 04/02/20 | | | | | | |
| Acrylonitrile | 23.0 | 0.40 | 2.0 | ug/L | 20.0 | ND | 115 | 40-160 | | | |
| Benzene | 21.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 107 | 37-151 | | | |
| Bromoform | 24.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 120 | 45-169 | | | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | | | |
| Chlorobenzene | 20.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 104 | 37-160 | | | |
| Dibromochloromethane | 24.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 121 | 53-149 | | | |
| Chloroethane | 19.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.7 | 14-230 | | | |
| Chloroform | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 51-138 | | | |
| Bromodichloromethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 35-155 | | | |
| 1,1-Dichloroethane | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | ND | 109 | 59-155 | | | |
| 1,2-Dichloroethane | 23.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 115 | 49-155 | | | |
| 1,1-Dichloroethene | 21.4 | 0.30 | 0.50 | ug/L | 20.0 | ND | 107 | 2-234 | | | |
| 1,2-Dichloropropane | 18.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 93.4 | 2-210 | | | |
| cis-1,3-Dichloropropene | 17.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 89.0 | 2-227 | | | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.6 | 17-183 | | | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | | | |
| Bromomethane | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 2-242 | | | |
| Chloromethane | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 2-273 | | | |
| Methylene chloride | 20.4 | 0.50 | 0.50 | ug/L | 20.0 | ND | 102 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.1 | 46-157 | | | |
| Tetrachloroethene | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 64-148 | | | |
| Toluene | 22.8 | 0.30 | 0.30 | ug/L | 20.0 | ND | 114 | 47-150 | | | |
| trans-1,2-Dichloroethene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 54-156 | | | |
| 1,1,1-Trichloroethane | 24.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 120 | 52-162 | | | |
| 1,1,2-Trichloroethane | 22.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 110 | 52-150 | | | |
| Trichloroethene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 70-157 | | | |
| Vinyl chloride | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 2-251 | | | |
| 1,2-Dichlorobenzene | 19.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 98.8 | 18-190 | | | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 59-156 | | | |
| 1,4-Dichlorobenzene | 20.9 | 0.10 | 0.50 | ug/L | 20.0 | ND | 104 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *29.0* | | | *ug/L* | *25.0* | | *116* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.1* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03040 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03040-MSD1)** | | **Source: 20C3138-02** | | | Prepared: 03/31/20 Analyzed: 04/02/20 | | | | | | |
| Acrylonitrile | 23.6 | 0.40 | 2.0 | ug/L | 20.0 | ND | 118 | 40-160 | 2.74 | 60 | |
| Benzene | 22.4 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 37-151 | 4.25 | 61 | |
| Bromoform | 23.2 | 0.30 | 0.50 | ug/L | 20.0 | ND | 116 | 45-169 | 3.47 | 42 | |
| Carbon tetrachloride | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 70-140 | 0.155 | 41 | |
| Chlorobenzene | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | ND | 101 | 37-160 | 3.61 | 53 | |
| Dibromochloromethane | 24.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 53-149 | 0.743 | 50 | |
| Chloroethane | 21.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 14-230 | 8.12 | 78 | |
| Chloroform | 24.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 124 | 51-138 | 5.93 | 54 | |
| Bromodichloromethane | 23.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 117 | 35-155 | 3.79 | 56 | |
| 1,1-Dichloroethane | 22.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 113 | 59-155 | 3.20 | 40 | |
| 1,2-Dichloroethane | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 116 | 49-155 | 0.863 | 49 | |
| 1,1-Dichloroethene | 22.7 | 0.30 | 0.50 | ug/L | 20.0 | ND | 114 | 2-234 | 6.21 | 32 | |
| 1,2-Dichloropropane | 19.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.8 | 2-210 | 1.43 | 55 | |
| cis-1,3-Dichloropropene | 18.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 94.4 | 2-227 | 5.94 | 58 | |
| trans-1,3-Dichloropropene | 19.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 97.6 | 17-183 | 0.00 | 86 | |
| Ethylbenzene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 37-162 | 2.37 | 63 | |
| Bromomethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 2-242 | 2.98 | 61 | |
| Chloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 119 | 2-273 | 0.886 | 60 | |
| Methylene chloride | 21.5 | 0.50 | 0.50 | ug/L | 20.0 | ND | 107 | 2-221 | 5.16 | 28 | |
| 1,1,2,2-Tetrachloroethane | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 96.7 | 46-157 | 2.45 | 61 | |
| Tetrachloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 64-148 | 1.84 | 39 | |
| Toluene | 22.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 112 | 47-150 | 2.21 | 41 | |
| trans-1,2-Dichloroethene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 54-156 | 6.29 | 45 | |
| 1,1,1-Trichloroethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 52-162 | 7.85 | 36 | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 52-150 | 4.27 | 45 | |
| Trichloroethene | 22.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 70-157 | 5.90 | 48 | |
| Vinyl chloride | 25.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 127 | 2-251 | 3.97 | 66 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 3.38 | 57 | |
| 1,3-Dichlorobenzene | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 104 | 59-156 | 0.432 | 43 | |
| 1,4-Dichlorobenzene | 21.3 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | 1.95 | 57 | |
| *Surrogate: Bromofluorobenzene* | *28.7* | | | *ug/L* | *25.0* | | *115* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.7* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05090-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | 2.25 | 0.90 | 10 | ug/L | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AC05090-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *38.8* | | | *ug/L* | *40.0* | | *97.1* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *13.0* | | | *ug/L* | *40.0* | | *32.6* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.1* | | | *ug/L* | *40.0* | | *87.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.2* | | | *ug/L* | *40.0* | | *80.5* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.8* | | | *ug/L* | *40.0* | | *27.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *32.2* | | | *ug/L* | *40.0* | | *80.4* | *4-168* | | | |
| **LCS (AC05090-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 32.8 | 0.70 | 5.0 | ug/L | 40.0 | | 81.9 | 36-120 | | | |
| 2,4-Dichlorophenol | 34.2 | 0.70 | 5.0 | ug/L | 40.0 | | 85.6 | 53-122 | | | |
| 2,4-Dimethylphenol | 41.8 | 1.0 | 2.0 | ug/L | 50.0 | | 83.5 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 35.9 | 3.0 | 5.0 | ug/L | 40.0 | | 89.8 | 53-130 | | | |
| 2,4-Dinitrophenol | 55.3 | 5.0 | 5.0 | ug/L | 50.0 | | 111 | 10-173 | | | |
| 2-Nitrophenol | 38.9 | 0.90 | 10 | ug/L | 40.0 | | 97.2 | 45-167 | | | |
| 4-Nitrophenol | 18.2 | 3.0 | 10 | ug/L | 40.0 | | 45.6 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 48.3 | 1.0 | 1.0 | ug/L | 40.0 | | 121 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 33.9 | 0.60 | 5.0 | ug/L | 40.0 | | 84.8 | 36-102 | | | |
| Pentachlorophenol | 41.6 | 4.0 | 5.0 | ug/L | 40.0 | | 104 | 38-152 | | | |
| Phenol | 18.1 | 0.50 | 1.0 | ug/L | 40.0 | | 45.3 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 33.6 | 0.70 | 10 | ug/L | 40.0 | | 83.9 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 36.1 | 0.90 | 5.0 | ug/L | 40.0 | | 90.3 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 35.4 | 0.90 | 1.0 | ug/L | 40.0 | | 88.4 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 37.0 | 1.0 | 2.0 | ug/L | 40.0 | | 92.6 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 41.2 | 3.0 | 5.0 | ug/L | 40.0 | | 103 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 37.3 | 1.0 | 5.0 | ug/L | 40.0 | | 93.3 | 65-120 | | | |
| Butyl benzyl phthalate | 46.0 | 0.60 | 10 | ug/L | 40.0 | | 115 | 2-140 | | | |
| 2-Chloronaphthalene | 29.7 | 0.60 | 10 | ug/L | 40.0 | | 74.2 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 43.9 | 0.90 | 5.0 | ug/L | 40.0 | | 110 | 38-145 | | | |
| 1,4-Dichlorobenzene | 32.5 | 0.60 | 1.0 | ug/L | 40.0 | | 81.2 | 32-91 | | | |
| 1,3-Dichlorobenzene | 33.0 | 0.60 | 1.0 | ug/L | 40.0 | | 82.5 | 31-92 | | | |
| 1,2-Dichlorobenzene | 32.8 | 0.60 | 2.0 | ug/L | 40.0 | | 82.1 | 33-93 | | | |
| Diethyl phthalate | 35.4 | 0.30 | 2.0 | ug/L | 40.0 | | 88.6 | 2-120 | | | |
| Dimethyl phthalate | 39.4 | 0.80 | 2.0 | ug/L | 40.0 | | 98.5 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AC05090-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Di-n-butyl phthalate | 41.6 | 0.90 | 10 | ug/L | 40.0 | | 104 | 8-120 | | | |
| 2,4-Dinitrotoluene | 37.2 | 0.80 | 5.0 | ug/L | 40.0 | | 93.1 | 48-127 | | | |
| 2,6-Dinitrotoluene | 38.2 | 0.80 | 5.0 | ug/L | 40.0 | | 95.4 | 68-137 | | | |
| Di-n-octyl phthalate | 44.9 | 0.60 | 10 | ug/L | 40.0 | | 112 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 41.8 | 0.60 | 1.0 | ug/L | 40.0 | | 104 | 52-115 | | | |
| Hexachlorobenzene | 36.4 | 0.90 | 1.0 | ug/L | 40.0 | | 91.1 | 8-142 | | | |
| Hexachlorobutadiene | 30.9 | 0.80 | 1.0 | ug/L | 40.0 | | 77.3 | 38-120 | | | |
| Hexachlorocyclopentadiene | 15.5 | 4.0 | 5.0 | ug/L | 40.0 | | 38.6 | 16-93 | | | |
| Hexachloroethane | 30.8 | 0.60 | 1.0 | ug/L | 40.0 | | 77.0 | 55-120 | | | |
| Isophorone | 40.9 | 0.30 | 1.0 | ug/L | 40.0 | | 102 | 47-180 | | | |
| Nitrobenzene | 34.5 | 0.90 | 1.0 | ug/L | 40.0 | | 86.3 | 54-158 | | | |
| N-Nitrosodimethylamine | 21.6 | 0.30 | 5.0 | ug/L | 40.0 | | 54.1 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 43.4 | 0.80 | 5.0 | ug/L | 40.0 | | 108 | 14-198 | | | |
| N-Nitrosodiphenylamine | 43.3 | 1.0 | 1.0 | ug/L | 40.0 | | 108 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 30.6 | 0.60 | 5.0 | ug/L | 40.0 | | 76.5 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *38.1* | | | *ug/L* | *40.0* | | *95.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *25.0* | | | *ug/L* | *40.0* | | *62.6* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *41.4* | | | *ug/L* | *40.0* | | *103* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *45.5* | | | *ug/L* | *40.0* | | *114* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *19.0* | | | *ug/L* | *40.0* | | *47.5* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *47.1* | | | *ug/L* | *40.0* | | *118* | *4-168* | | | |
| **Matrix Spike (AC05090-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 10.6 | 0.70 | 5.0 | ug/L | 40.0 | ND | 26.4 | 23-134 | | | |
| 2,4-Dichlorophenol | 11.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 27.6 | 39-135 | | | QM-05 |
| 2,4-Dimethylphenol | 39.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 78.7 | 32-120 | | | |
| 4,6-Dinitro-2-methylphenol | 9.97 | 3.0 | 5.0 | ug/L | 40.0 | ND | 24.9 | 7-181 | | | |
| 2,4-Dinitrophenol | 15.6 | 5.0 | 5.0 | ug/L | 50.0 | ND | 31.1 | 10-191 | | | |
| 2-Nitrophenol | 10.2 | 0.90 | 10 | ug/L | 40.0 | ND | 25.4 | 29-182 | | | QM-05 |
| 4-Nitrophenol | 7.52 | 3.0 | 10 | ug/L | 40.0 | ND | 18.8 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 49.6 | 1.0 | 1.0 | ug/L | 40.0 | ND | 124 | 22-147 | | | |
| Pentachlorophenol | 10.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 27.4 | 14-176 | | | |
| 2-Methylphenol (o-cresol) | 29.0 | 0.60 | 5.0 | ug/L | 40.0 | ND | 72.4 | 9-124 | | | |
| Phenol | 11.7 | 0.50 | 1.0 | ug/L | 40.0 | ND | 29.3 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 7.68 | 0.70 | 10 | ug/L | 40.0 | ND | 19.2 | 37-144 | | | QM-05, J |
| Bis(2-chloroethoxy)methane | 32.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 82.3 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 32.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.3 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AC05090-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 32.3 | 1.0 | 2.0 | ug/L | 40.0 | ND | 80.8 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 31.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 79.1 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 36.0 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.0 | 53-127 | | | |
| Butyl benzyl phthalate | 27.7 | 0.60 | 10 | ug/L | 40.0 | ND | 69.2 | 2-152 | | | |
| 2-Chloronaphthalene | 26.5 | 0.60 | 10 | ug/L | 40.0 | ND | 66.3 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 43.7 | 0.90 | 5.0 | ug/L | 40.0 | ND | 109 | 25-158 | | | |
| 1,3-Dichlorobenzene | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.0 | 1-106 | | | |
| 1,2-Dichlorobenzene | 29.4 | 0.60 | 2.0 | ug/L | 40.0 | ND | 73.6 | 7-104 | | | |
| 1,4-Dichlorobenzene | 29.4 | 0.60 | 1.0 | ug/L | 40.0 | ND | 73.6 | 3-105 | | | |
| Diethyl phthalate | 22.6 | 0.30 | 2.0 | ug/L | 40.0 | 1.95 | 51.6 | 2-120 | | | |
| Dimethyl phthalate | 14.9 | 0.80 | 2.0 | ug/L | 40.0 | ND | 37.2 | 2-120 | | | |
| Di-n-butyl phthalate | 34.3 | 0.90 | 10 | ug/L | 40.0 | 3.31 | 77.5 | 1-120 | | | |
| 2,4-Dinitrotoluene | 38.9 | 0.80 | 5.0 | ug/L | 40.0 | ND | 97.2 | 39-139 | | | |
| 2,6-Dinitrotoluene | 37.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 93.9 | 50-158 | | | |
| Di-n-octyl phthalate | 39.4 | 0.60 | 10 | ug/L | 40.0 | ND | 98.4 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 35.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 88.7 | 39-116 | | | |
| Hexachlorobenzene | 35.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 89.0 | 2-152 | | | |
| Hexachlorobutadiene | 29.0 | 0.80 | 1.0 | ug/L | 40.0 | ND | 72.6 | 24-120 | | | |
| Hexachlorocyclopentadiene | 10.2 | 4.0 | 5.0 | ug/L | 40.0 | ND | 25.5 | 10-93 | | | |
| Hexachloroethane | 28.1 | 0.60 | 1.0 | ug/L | 40.0 | ND | 70.2 | 40-120 | | | |
| Isophorone | 38.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 95.2 | 21-196 | | | |
| Nitrobenzene | 32.7 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.8 | 35-180 | | | |
| N-Nitrosodimethylamine | 25.6 | 0.30 | 5.0 | ug/L | 40.0 | ND | 64.1 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 37.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 93.4 | 2-230 | | | |
| N-Nitrosodiphenylamine | 38.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 97.2 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 29.5 | 0.60 | 5.0 | ug/L | 40.0 | ND | 73.7 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.2* | | | *ug/L* | *40.0* | | *73.0* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *6.82* | | | *ug/L* | *40.0* | | *17.0* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.2* | | | *ug/L* | *40.0* | | *90.6* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.7* | | | *ug/L* | *40.0* | | *99.2* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *10.6* | | | *ug/L* | *40.0* | | *26.4* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *12.9* | | | *ug/L* | *40.0* | | *32.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05090-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 16.4 | 0.70 | 5.0 | ug/L | 40.0 | ND | 41.0 | 23-134 | 43.4 | 61 | |
| 2,4-Dichlorophenol | 17.0 | 0.70 | 5.0 | ug/L | 40.0 | ND | 42.4 | 39-135 | 42.4 | 50 | |
| 2,4-Dimethylphenol | 39.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 78.5 | 32-120 | 0.204 | 58 | |
| 4,6-Dinitro-2-methylphenol | 16.4 | 3.0 | 5.0 | ug/L | 40.0 | ND | 41.0 | 7-181 | 48.7 | 203 | |
| 2,4-Dinitrophenol | 21.1 | 5.0 | 5.0 | ug/L | 50.0 | ND | 42.2 | 10-191 | 30.2 | 132 | |
| 2-Nitrophenol | 20.0 | 0.90 | 10 | ug/L | 40.0 | ND | 50.1 | 29-182 | 65.5 | 55 | QM-08 |
| 4-Nitrophenol | 12.2 | 3.0 | 10 | ug/L | 40.0 | ND | 30.6 | 7-132 | 47.6 | 131 | |
| 4-Chloro-3-methylphenol | 32.5 | 1.0 | 1.0 | ug/L | 40.0 | ND | 81.2 | 22-147 | 41.7 | 73 | |
| 2-Methylphenol (o-cresol) | 32.4 | 0.60 | 5.0 | ug/L | 40.0 | ND | 81.1 | 9-124 | 11.3 | 28 | |
| Pentachlorophenol | 18.6 | 4.0 | 5.0 | ug/L | 40.0 | ND | 46.6 | 14-176 | 52.0 | 86 | |
| Phenol | 14.5 | 0.50 | 1.0 | ug/L | 40.0 | ND | 36.3 | 5-120 | 21.4 | 64 | |
| 2,4,6-Trichlorophenol | 17.8 | 0.70 | 10 | ug/L | 40.0 | ND | 44.5 | 37-144 | 79.5 | 58 | QM-08 |
| Bis(2-chloroethoxy)methane | 34.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 86.1 | 33-184 | 4.45 | 54 | |
| Bis(2-chloroethyl)ether | 33.2 | 0.90 | 1.0 | ug/L | 40.0 | ND | 83.0 | 12-158 | 2.04 | 108 | |
| Bis(2-chloroisopropyl)ether | 34.4 | 1.0 | 2.0 | ug/L | 40.0 | ND | 86.1 | 36-166 | 6.41 | 76 | |
| Bis(2-ethylhexyl)phthalate | 33.3 | 3.0 | 5.0 | ug/L | 40.0 | ND | 83.3 | 8-158 | 5.14 | 82 | |
| 4-Bromophenyl phenyl ether | 36.1 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.3 | 53-127 | 0.333 | 43 | |
| Butyl benzyl phthalate | 9.60 | 0.60 | 10 | ug/L | 40.0 | ND | 24.0 | 2-152 | 97.0 | 60 | QM-08, J |
| 2-Chloronaphthalene | 32.5 | 0.60 | 10 | ug/L | 40.0 | ND | 81.3 | 60-120 | 20.3 | 24 | |
| 4-Chlorophenyl phenyl ether | 35.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 87.6 | 25-158 | 22.0 | 61 | |
| 1,2-Dichlorobenzene | 29.9 | 0.60 | 2.0 | ug/L | 40.0 | ND | 74.7 | 7-104 | 1.52 | 41 | |
| 1,3-Dichlorobenzene | 29.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.8 | 1-106 | 1.01 | 41 | |
| 1,4-Dichlorobenzene | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.1 | 3-105 | 0.711 | 42 | |
| Diethyl phthalate | 7.36 | 0.30 | 2.0 | ug/L | 40.0 | 1.95 | 13.5 | 2-120 | 102 | 100 | QM-08 |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | 200 | 183 | QM-05, QM-08, U |
| Di-n-butyl phthalate | 25.3 | 0.90 | 10 | ug/L | 40.0 | 3.31 | 55.1 | 1-120 | 30.0 | 47 | |
| 2,4-Dinitrotoluene | 27.5 | 0.80 | 5.0 | ug/L | 40.0 | ND | 68.7 | 39-139 | 34.3 | 42 | |
| 2,6-Dinitrotoluene | 30.1 | 0.80 | 5.0 | ug/L | 40.0 | ND | 75.2 | 50-158 | 22.1 | 48 | |
| Di-n-octyl phthalate | 7.82 | 0.60 | 10 | ug/L | 40.0 | ND | 19.6 | 4-146 | 134 | 69 | QM-08, J |
| 1,2-Diphenylhydrazine | 39.0 | 0.60 | 1.0 | ug/L | 40.0 | ND | 97.6 | 39-116 | 9.56 | 25 | |
| Hexachlorobenzene | 33.9 | 0.90 | 1.0 | ug/L | 40.0 | ND | 84.8 | 2-152 | 4.86 | 55 | |
| Hexachlorobutadiene | 29.0 | 0.80 | 1.0 | ug/L | 40.0 | ND | 72.4 | 24-120 | 0.207 | 62 | |
| Hexachlorocyclopentadiene | 12.9 | 4.0 | 5.0 | ug/L | 40.0 | ND | 32.4 | 10-93 | 23.7 | 55 | |
| Hexachloroethane | 29.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 74.1 | 40-120 | 5.44 | 52 | |
| Isophorone | 37.7 | 0.30 | 1.0 | ug/L | 40.0 | ND | 94.3 | 21-196 | 1.03 | 93 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AC05090 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AC05090-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/01/20 Analyzed: 04/15/20 | | | | | | |
| Nitrobenzene | 33.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 82.8 | 35-180 | 1.12 | 62 | |
| N-Nitrosodimethylamine | 21.9 | 0.30 | 5.0 | ug/L | 40.0 | ND | 54.7 | 10-84 | 15.8 | 59 | |
| N-Nitrosodi-n-propylamine | 39.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 98.4 | 2-230 | 5.24 | 87 | |
| N-Nitrosodiphenylamine | 40.8 | 1.0 | 1.0 | ug/L | 40.0 | ND | 102 | 40-115 | 4.90 | 25 | |
| 1,2,4-Trichlorobenzene | 29.2 | 0.60 | 5.0 | ug/L | 40.0 | ND | 72.9 | 44-142 | 1.13 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *36.9* | | | *ug/L* | *40.0* | | *92.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *11.7* | | | *ug/L* | *40.0* | | *29.2* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.0* | | | *ug/L* | *40.0* | | *89.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *34.5* | | | *ug/L* | *40.0* | | *86.3* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *13.7* | | | *ug/L* | *40.0* | | *34.2* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *25.3* | | | *ug/L* | *40.0* | | *63.2* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03025 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03025-BLK1)** | | | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *36.4* | | | *ug/L* | *40.0* | | *90.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.5* | | | *ug/L* | *40.0* | | *93.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.0* | | | *ug/L* | *40.0* | | *99.9* | *36-141* | | | |
| **LCS (AD03025-BS1)** | | | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 24.6 | 3.00 | 5.00 | ug/L | 79.4 | | 31.0 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 82.0 | 2.00 | 5.00 | ug/L | 79.4 | | 103 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *36.8* | | | *ug/L* | *40.0* | | *91.9* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *37.8* | | | *ug/L* | *40.0* | | *94.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.3* | | | *ug/L* | *40.0* | | *101* | *36-141* | | | |
| **Matrix Spike (AD03025-MS1)** | | **Source: 20C3406-01** | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 46.1 | 3.00 | 5.00 | ug/L | 79.4 | ND | 58.1 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 79.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 100 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.6* | | | *ug/L* | *40.0* | | *91.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *38.8* | | | *ug/L* | *40.0* | | *96.9* | *36-141* | | | |
| **Matrix Spike Dup (AD03025-MSD1)** | | **Source: 20C3406-01** | | | Prepared: 04/01/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 63.4 | 3.00 | 5.00 | ug/L | 79.4 | ND | 79.8 | 4-262 | 31.5 | 108 | |
| 3,3´-Dichlorobenzidine | 83.1 | 2.00 | 5.00 | ug/L | 79.4 | ND | 105 | 4-262 | 4.31 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *37.8* | | | *ug/L* | *40.0* | | *94.4* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *39.5* | | | *ug/L* | *40.0* | | *98.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.8* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD04124-BLK1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *24.9* | | | *ug/L* | *40.0* | | *62.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *28.9* | | | *ug/L* | *40.0* | | *72.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *30.0* | | | *ug/L* | *40.0* | | *75.0* | *37-139* | | | |
| **LCS (AD04124-BS1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 35.6 | 0.20 | 0.20 | ug/L | 40.0 | | 88.9 | 60-132 | | | |
| Acenaphthylene | 37.2 | 0.20 | 0.20 | ug/L | 40.0 | | 93.1 | 54-126 | | | |
| Anthracene | 34.3 | 0.090 | 0.20 | ug/L | 40.0 | | 85.7 | 43-120 | | | |
| Benzo (a) anthracene | 36.5 | 0.20 | 0.20 | ug/L | 40.0 | | 91.2 | 42-133 | | | |
| Benzo (a) pyrene | 39.7 | 0.20 | 0.20 | ug/L | 40.0 | | 99.2 | 32-148 | | | |
| Benzo (b) fluoranthene | 38.0 | 0.20 | 0.20 | ug/L | 40.0 | | 94.9 | 42-140 | | | |
| Benzo (g,h,i) perylene | 37.2 | 0.10 | 0.20 | ug/L | 40.0 | | 93.1 | 2-195 | | | |
| Benzo (k) fluoranthene | 37.1 | 0.20 | 0.20 | ug/L | 40.0 | | 92.8 | 25-146 | | | |
| Chrysene | 37.9 | 0.20 | 0.20 | ug/L | 40.0 | | 94.7 | 44-140 | | | |
| Dibenz (a,h) anthracene | 35.7 | 0.10 | 0.20 | ug/L | 40.0 | | 89.3 | 2-200 | | | |
| Fluoranthene | 27.9 | 0.070 | 0.20 | ug/L | 40.0 | | 69.6 | 43-121 | | | |
| Fluorene | 29.7 | 0.20 | 0.20 | ug/L | 40.0 | | 74.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 35.7 | 0.030 | 0.20 | ug/L | 40.0 | | 89.3 | 2-151 | | | |
| Naphthalene | 35.1 | 0.090 | 0.20 | ug/L | 40.0 | | 87.7 | 36-120 | | | |
| Phenanthrene | 31.9 | 0.10 | 0.20 | ug/L | 40.0 | | 79.8 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD04124-BS1)** | | | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Pyrene | 41.4 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *34.7* | | | *ug/L* | *40.0* | | *86.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *34.5* | | | *ug/L* | *40.0* | | *86.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *48.0* | | | *ug/L* | *40.0* | | *120* | *37-139* | | | |
| **Matrix Spike (AD04124-MS1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 18.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 45.0 | 47-145 | | | QM-05 |
| Acenaphthylene | 18.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 47.1 | 33-145 | | | |
| Anthracene | 28.7 | 0.090 | 0.20 | ug/L | 40.0 | ND | 71.8 | 27-133 | | | |
| Benzo (a) anthracene | 32.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 80.4 | 33-143 | | | |
| Benzo (a) pyrene | 49.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 123 | 17-163 | | | |
| Benzo (b) fluoranthene | 47.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 119 | 24-159 | | | |
| Benzo (g,h,i) perylene | 52.4 | 0.10 | 0.20 | ug/L | 40.0 | ND | 131 | 2-219 | | | |
| Benzo (k) fluoranthene | 46.3 | 0.20 | 0.20 | ug/L | 40.0 | ND | 116 | 11-162 | | | |
| Chrysene | 36.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 92.0 | 17-168 | | | |
| Dibenz (a,h) anthracene | 50.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 126 | 2-227 | | | |
| Fluoranthene | 23.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 59.0 | 26-137 | | | |
| Fluorene | 13.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 34.3 | 59-121 | | | QM-05 |
| Indeno (1,2,3-cd) pyrene | 49.6 | 0.030 | 0.20 | ug/L | 40.0 | ND | 124 | 2-171 | | | |
| Naphthalene | 34.6 | 0.090 | 0.20 | ug/L | 40.0 | ND | 86.6 | 21-133 | | | |
| Phenanthrene | 20.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 50.8 | 54-120 | | | QM-05 |
| Pyrene | 31.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 79.4 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *22.3* | | | *ug/L* | *40.0* | | *55.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.8* | | | *ug/L* | *40.0* | | *96.9* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *32.9* | | | *ug/L* | *40.0* | | *82.4* | *37-139* | | | |
| **Matrix Spike Dup (AD04124-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 35.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.7 | 47-145 | 66.3 | 48 | QM-08 |
| Acenaphthylene | 38.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.0 | 33-145 | 68.4 | 74 | |
| Anthracene | 34.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 84.9 | 27-133 | 16.8 | 66 | |
| Benzo (a) anthracene | 30.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.8 | 33-143 | 4.67 | 53 | |
| Benzo (a) pyrene | 32.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 82.1 | 17-163 | 39.9 | 72 | |
| Benzo (b) fluoranthene | 34.2 | 0.20 | 0.20 | ug/L | 40.0 | ND | 85.4 | 24-159 | 32.6 | 71 | |
| Benzo (g,h,i) perylene | 32.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 81.6 | 2-219 | 46.4 | 97 | |
| Benzo (k) fluoranthene | 32.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.4 | 11-162 | 34.8 | 63 | |
| Chrysene | 32.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.3 | 17-168 | 12.4 | 87 | |
| Dibenz (a,h) anthracene | 30.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 76.7 | 2-227 | 48.4 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:05 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04124 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD04124-MSD1)** | | **Source: 20C3269-01** | | | Prepared: 04/16/20 Analyzed: 04/20/20 | | | | | | |
| Fluoranthene | 24.6 | 0.070 | 0.20 | ug/L | 40.0 | ND | 61.6 | 26-137 | 4.15 | 66 | |
| Fluorene | 35.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.7 | 59-121 | 89.3 | 38 | QM-08 |
| Indeno (1,2,3-cd) pyrene | 31.2 | 0.030 | 0.20 | ug/L | 40.0 | ND | 77.9 | 2-171 | 45.7 | 99 | |
| Naphthalene | 38.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 94.9 | 21-133 | 9.12 | 65 | |
| Phenanthrene | 21.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 53.2 | 54-120 | 4.56 | 39 | QM-05 |
| Pyrene | 38.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.3 | 52-120 | 20.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *31.1* | | | *ug/L* | *40.0* | | *77.8* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *33.8* | | | *ug/L* | *40.0* | | *84.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.0* | | | *ug/L* | *40.0* | | *97.6* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:05 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Central Valley Laboratory*
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
9[illegible]-5190 F) 916-686-5192

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

# Work Order
# Chain of Custody Record

Lab No. 2003407



| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David C Walt |

Signature below authorizes work under terms stated on reverse side.

1.7 °C Initial

| Field Sampler - Print Name & Signature | Sample Collection | | Container | | | | | Preservative | | | | | | Matrix | | | Analysis Request | | | | | | | | | | | | Sample Notes | TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| David Walter David C Walt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Sample Identification** | **Date** | **Time** | 40ml Vial | Poly | Glass | Sleeve | Other | HCL | HNO3 | H2SO4 | Other | None | Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker | | |
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-4 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-9 | 3-26-2020 | 1335 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | | | |
| Blank - Ground Water | 3-26-2020 | — | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | | | |

TAT: 24 hr ○ 48 hr ○ (Lab Approval Required.) 1 wk ○ 2 wk (standard) ⊘ — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/26/20 | 1554 |
| [signature] | CW | 3-26-20 | 17:22 |
| CW | CW | 3-26-20 | 20:25 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

**WORK ORDER**

**Printed: 3/26/2020 8:16:49PM**

**20C3407**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 04/10/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/26/20 21:15

Logged In By: Leslie M. Quinn — Date Logged In: 03/26/20 20:15

Samples Received at: 1.7 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C3407-01 WMSA-DMW-9 [Water] Sampled 03/26/20 13:35 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 | BAL Metals | 04/23/20 13:35 | | |
| **20C3407-01 WMSA-DMW-9 [Water] Sampled 03/26/20 13:35 (GMT-08:00) Pacif** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/23/20 13:35 | | |

| | | | | | |
|---|---|---|---|---|---|
| [signature] | 3.26.20 | | [signature] | 3-30-20 | 14:00 |
| Relinquished By | Date | Time | Received By | Date | Time |
| [signature] | 3-30-20 | | AC | 03/31/20 | 1100 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

22 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C3733

Enclosed are the results of analyses for samples received by the laboratory on 03/31/20 20:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:01 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| EMSA-DMW-7 | 20C3733-01 | Water | 03/31/20 12:20 | 03/31/20 20:06 |
| Blank - Ground Water | 20C3733-02 | Water | 03/31/20 00:00 | 03/31/20 20:06 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 3.0 | 3.0 | ug/L | 1 | AD03309 | 04/07/20 17:38 | 04/07/20 17:38 | EPA 218.6 | LRN | 1551 | R-01, R-01a, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| **Antimony** | **5.4** | **2.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/10/20 05:01 | EPA 200.8 | MB | 1551 | |
| **Arsenic** | **100** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | R-01, U |
| **Cadmium** | **0.34** | **0.12** | **0.20** | **ug/L** | 2 | AD03199 | 04/03/20 08:40 | 04/10/20 05:21 | EPA 200.8 | MB | 1551 | |
| **Chromium** | **17** | **5.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | |
| **Copper** | **18** | **4.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | |
| **Lead** | **0.87** | **0.60** | **2.5** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/10/20 05:01 | EPA 200.8 | MB | 1551 | R-01, J |
| **Nickel** | **42** | **3.0** | **5.0** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **53** | **0.60** | **4.0** | **ug/L** | 2 | AD03199 | 04/03/20 08:40 | 04/11/20 04:51 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/10/20 05:21 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/10/20 05:01 | EPA 200.8 | MB | 1551 | R-01, U |
| **Zinc** | **60** | **40** | **50** | **ug/L** | 10 | AD03199 | 04/03/20 08:40 | 04/11/20 04:37 | EPA 200.8 | MB | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 3.0 | 3.0 | ug/L | 1 | AD03636 | 04/09/20 21:43 | 04/09/20 21:43 | EPA 218.6 | LRN | 1551 | R-01a, R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| **Antimony, dissolved** | **3.7** | **2.0** | **5.0** | **ug/L** | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Arsenic, dissolved** | **98** | **4.0** | **5.0** | **ug/L** | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AD03300 | 04/06/20 11:20 | 04/09/20 22:06 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **37** | **3.0** | **5.0** | **ug/L** | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01 |
| **Selenium, dissolved** | **52** | **0.60** | **4.0** | **ug/L** | 2 | AD03300 | 04/06/20 11:20 | 04/09/20 22:06 | EPA 200.8 | SMP | 1551 | R-01 |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AD03300 | 04/06/20 11:20 | 04/09/20 22:06 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/09/20 20:49 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Mercury | ND | 20.0 | 50.0 | ng/l | 100 | AD03867 | 04/13/20 16:00 | 04/14/20 14:09 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Mercury, dissolved | ND | 2.00 | 5.00 | ng/l | 10 | AD04058 | 04/15/20 16:00 | 04/16/20 15:04 | EPA 1631E | AJC | 2728 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| **Cyanide (total)** | **0.0027** | **0.0020** | **0.0030** | **mg/L** | 1 | AD03689 | 04/10/20 08:31 | 04/10/20 15:41 | 10-204-00-1X | EV | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AD03282 | 04/06/20 06:44 | 04/14/20 04:14 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AD03282 | 04/06/20 06:44 | 04/14/20 04:14 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *63.6 %* | *39-120* | | | *AD03282* | *04/06/20 06:44* | *04/14/20 04:14* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03745 | 04/10/20 11:00 | 04/10/20 13:11 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.9 %* | *76-129* | | | *AD03745* | *04/10/20 11:00* | *04/10/20 13:11* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AD03209 | 04/03/20 09:00 | 04/03/20 10:06 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *73.3 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AD03209 | 04/03/20 09:00 | 04/03/20 10:06 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *112 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *73.3 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *105 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 10:06* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| **Benzene** | **0.37** | **0.30** | **0.30** | **ug/L** | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:11 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *123 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *121 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:11* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:11* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C3733-02) Water Sampled: 03/31/20 00:00 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 13:46 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *122 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *119 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:46* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *109 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 13:46* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| **Phenol** | **1.4** | **0.50** | **1.0** | **ug/L** | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| **Di-n-butyl phthalate** | **2.5** | **0.90** | **10** | **ug/L** | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | QM-15, U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water** | **Sampled: 03/31/20 12:20** | | **Received: 03/31/20 20:06** | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 18:51 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *95.9 %* | *27-119* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *3.30 %* | *7-85* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | *S-09* |
| *Surrogate: Nitrobenzene-d5* | | *87.4 %* | *15-314* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *93.8 %* | *36-141* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *5.62 %* | *1-65* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *5.22 %* | *4-168* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 18:51* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AD03281 | 04/06/20 06:43 | 04/08/20 22:52 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AD03281 | 04/06/20 06:43 | 04/08/20 22:52 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *81.5 %* | *27-119* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 22:52* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *84.2 %* | *15-314* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 22:52* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *92.9 %* | *36-141* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 22:52* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMSA-DMW-7 (20C3733-01) Water Sampled: 03/31/20 12:20 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | QM-15, U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 21:29 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *67.9 %* | *24-119* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 21:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *66.2 %* | *15-314* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 21:29* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *85.2 %* | *37-139* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 21:29* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03309 - General Prep** | | | | | | | | | | | |
| **Blank (AD03309-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03309-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AD03309-DUP1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03309-MS1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.96 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.6 | 90-110 | | | |
| **Matrix Spike Dup (AD03309-MSD1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 0.100 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AD03199-BLK1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03199-BS1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 21.2 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 21.0 | 0.060 | 0.25 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Nickel | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Zinc | 103 | 4.0 | 5.0 | ug/L | 100 | | 103 | 85-115 | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 1.27 | 0.80 | 2.0 | ug/L | | 1.28 | | | 0.788 | 20 | R-01, J |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.9 | 1.6 | 2.0 | ug/L | | 10.8 | | | 0.103 | 20 | |
| Lead | 1.44 | 0.24 | 1.0 | ug/L | | 1.38 | | | 3.92 | 20 | |
| Nickel | 1.65 | 1.2 | 2.0 | ug/L | | 1.78 | | | 7.60 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Silver | 0.389 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 96.5 | 16 | 20 | ug/L | | 96.0 | | | 0.490 | 20 | |
| **Matrix Spike (AD03199-MS1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.4 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 106 | 70-130 | | | |
| Arsenic | 21.0 | 1.6 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium | 23.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Copper | 34.2 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 117 | 70-130 | | | |
| Lead | 22.7 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 107 | 70-130 | | | |
| Nickel | 23.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 108 | 70-130 | | | |
| Selenium | 20.0 | 1.2 | 8.0 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 199 | 16 | 20 | ug/L | 100 | 96.0 | 103 | 70-130 | | | |
| **Matrix Spike (AD03199-MS2)** | | **Source: 20C3319-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | 0.977 | 99.5 | 70-130 | | | |
| Arsenic | 22.0 | 1.6 | 2.0 | ug/L | 20.0 | 1.91 | 100 | 70-130 | | | |
| Beryllium | 20.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 28.0 | 2.0 | 2.0 | ug/L | 20.0 | 4.72 | 116 | 70-130 | | | |
| Copper | 33.8 | 1.6 | 2.0 | ug/L | 20.0 | 13.8 | 99.9 | 70-130 | | | |
| Lead | 24.6 | 0.24 | 1.0 | ug/L | 20.0 | 3.41 | 106 | 70-130 | | | |
| Nickel | 29.4 | 1.2 | 2.0 | ug/L | 20.0 | 6.54 | 114 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 21.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc | 147 | 16 | 20 | ug/L | 100 | 48.9 | 98.2 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03199-MSD1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.3 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 105 | 70-130 | 0.276 | 20 | |
| Arsenic | 21.8 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.79 | 20 | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 0.171 | 20 | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 1.89 | 20 | |
| Chromium | 24.5 | 2.0 | 2.0 | ug/L | 20.0 | ND | 123 | 70-130 | 5.23 | 20 | |
| Copper | 31.8 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 105 | 70-130 | 7.37 | 20 | |
| Lead | 22.9 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 108 | 70-130 | 0.841 | 20 | |
| Nickel | 24.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 113 | 70-130 | 4.16 | 20 | |
| Selenium | 20.2 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.861 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 1.63 | 20 | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | 2.11 | 20 | |
| Zinc | 197 | 16 | 20 | ug/L | 100 | 96.0 | 101 | 70-130 | 0.940 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03636 - General Prep** | | | | | | | | | | | |
| **Blank (AD03636-BLK1)** | | | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03636-BS1)** | | | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.94 | 0.30 | 1.0 | ug/L | 10.0 | | 99.4 | 90-110 | | | |
| **Duplicate (AD03636-DUP1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03636-MS1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.64 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.4 | 90-110 | | | |
| **Matrix Spike Dup (AD03636-MSD1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.78 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.8 | 90-110 | 1.48 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03300 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AD03300-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0570 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03300-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 20.2 | 0.20 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Arsenic, dissolved | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Beryllium, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Cadmium, dissolved | 20.1 | 0.060 | 0.10 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Chromium, dissolved | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.9 | 85-115 | | | |
| Copper, dissolved | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead, dissolved | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Nickel, dissolved | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Selenium, dissolved | 19.6 | 0.30 | 2.0 | ug/L | 20.0 | | 98.0 | 85-115 | | | |
| Silver, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 97.8 | 4.0 | 5.0 | ug/L | 100 | | 97.8 | 85-115 | | | |
| **Duplicate (AD03300-DUP1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 0.257 | 0.20 | 0.50 | ug/L | | 0.271 | | | 5.56 | 20 | J |
| Arsenic, dissolved | 3.37 | 0.40 | 0.50 | ug/L | | 3.75 | | | 10.7 | 20 | |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper, dissolved | 0.914 | 0.40 | 0.50 | ug/L | | 0.915 | | | 0.123 | 20 | |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | ND | | | | 20 | U |
| Nickel, dissolved | 3.73 | 0.30 | 0.50 | ug/L | | 3.85 | | | 3.25 | 20 | |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03300 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AD03300-DUP1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | U |
| **MRL Check (AD03300-MRL1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Silver, dissolved | 0.203 | 0.050 | 0.10 | ug/L | 0.160 | | 127 | 0-200 | | | |
| **Matrix Spike (AD03300-MS1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 20.9 | 0.20 | 0.50 | ug/L | 20.0 | 0.271 | 103 | 70-130 | | | |
| Arsenic, dissolved | 24.2 | 0.40 | 0.50 | ug/L | 20.0 | 3.75 | 102 | 70-130 | | | |
| Beryllium, dissolved | 19.8 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Cadmium, dissolved | 19.7 | 0.060 | 0.10 | ug/L | 20.0 | ND | 98.7 | 70-130 | | | |
| Chromium, dissolved | 19.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Copper, dissolved | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | 0.915 | 102 | 70-130 | | | |
| Lead, dissolved | 20.0 | 0.060 | 0.25 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Nickel, dissolved | 22.7 | 0.30 | 0.50 | ug/L | 20.0 | 3.85 | 94.5 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Thallium, dissolved | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Zinc, dissolved | 96.0 | 4.0 | 5.0 | ug/L | 100 | ND | 96.0 | 70-130 | | | |
| **Matrix Spike Dup (AD03300-MSD1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 21.0 | 0.20 | 0.50 | ug/L | 20.0 | 0.271 | 104 | 70-130 | 0.524 | 20 | |
| Arsenic, dissolved | 24.6 | 0.40 | 0.50 | ug/L | 20.0 | 3.75 | 104 | 70-130 | 1.59 | 20 | |
| Beryllium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | 1.88 | 20 | |
| Cadmium, dissolved | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | 2.67 | 20 | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.1 | 70-130 | 1.07 | 20 | |
| Copper, dissolved | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | 0.915 | 103 | 70-130 | 1.38 | 20 | |
| Lead, dissolved | 20.4 | 0.060 | 0.25 | ug/L | 20.0 | ND | 102 | 70-130 | 2.04 | 20 | |
| Nickel, dissolved | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | 3.85 | 95.6 | 70-130 | 0.996 | 20 | |
| Selenium, dissolved | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | ND | 103 | 70-130 | 2.31 | 20 | |
| Silver, dissolved | 20.0 | 0.050 | 0.10 | ug/L | 20.0 | ND | 99.9 | 70-130 | 4.07 | 20 | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 3.96 | 20 | |
| Zinc, dissolved | 97.6 | 4.0 | 5.0 | ug/L | 100 | ND | 97.6 | 70-130 | 1.69 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03867 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03867-BLK1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03867-BS1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 4.93 | 0.200 | 0.500 | ng/l | 5.00 | | 98.5 | 77-123 | | | |
| **Matrix Spike (AD03867-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.791 | 98.6 | 71-125 | | | |
| **Matrix Spike (AD03867-MS2)** | | **Source: 20D0468-02** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 22.8 | 0.200 | 0.500 | ng/l | 25.0 | 0.439 | 89.6 | 71-125 | | | |
| **Matrix Spike Dup (AD03867-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 25.5 | 0.200 | 0.500 | ng/l | 25.0 | 0.791 | 98.8 | 71-125 | 0.118 | 24 | |
| **Matrix Spike Dup (AD03867-MSD2)** | | **Source: 20D0468-02** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 23.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.439 | 90.2 | 71-125 | 0.698 | 24 | |
| **Reference (AD03867-SRM1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 44.4 | 0.200 | 0.500 | ng/l | 50.0 | | 88.8 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD04058-BLK1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD04058-BS1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 4.62 | 0.200 | 0.500 | ng/l | 5.00 | | 92.4 | 77-123 | | | |
| **Matrix Spike (AD04058-MS1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 96.6 | 71-125 | | | |
| **Matrix Spike Dup (AD04058-MSD1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.7 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 97.8 | 71-125 | 1.22 | 24 | |
| **Reference (AD04058-SRM1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 43.2 | 0.200 | 0.500 | ng/l | 50.0 | | 86.4 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03689 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03689-BLK1)** | | | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03689-BS1)** | | | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.209 | 0.0020 | 0.0030 | mg/L | 0.200 | | 104 | 85-115 | | | |
| **Duplicate (AD03689-DUP1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03689-MS1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.219 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |
| **Matrix Spike (AD03689-MS2)** | | **Source: 20D0433-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.204 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 102 | 85-115 | | | |
| **Matrix Spike Dup (AD03689-MSD1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.213 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 107 | 85-115 | 2.80 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03282 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AD03282-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/13/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *65.2* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS (AD03282-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/13/20 | | | | | | |
| TPH as Diesel | 2400 | 50 | 250 | ug/L | 2100 | | 114 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *68.6* | | | *ug/L* | *57.4* | | *120* | *39-120* | | | |
| **LCS (AD03282-BS2)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Motor Oil | 1550 | 100 | 250 | ug/L | 2010 | | 77.3 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *65.5* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS Dup (AD03282-BSD1)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Diesel | 2170 | 50 | 250 | ug/L | 2100 | | 103 | 61-120 | 9.94 | 25 | |
| *Surrogate: Tetratetracontane* | *65.2* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS Dup (AD03282-BSD2)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Motor Oil | 1440 | 100 | 250 | ug/L | 2010 | | 71.7 | 71-125 | 7.49 | 25 | |
| *Surrogate: Tetratetracontane* | *52.9* | | | *ug/L* | *57.4* | | *92.1* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03745 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03745-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *76-129* | | | |
| **LCS (AD03745-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 195 | 50 | 50 | ug/L | 200 | | 97.3 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.2* | *76-129* | | | |
| **LCS Dup (AD03745-BSD1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 187 | 50 | 50 | ug/L | 200 | | 93.3 | 67-132 | 4.23 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *76-129* | | | |
| **Matrix Spike (AD03745-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 206 | 50 | 50 | ug/L | 200 | ND | 103 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *23.0* | | | *ug/L* | *25.0* | | *92.2* | *76-129* | | | |
| **Matrix Spike Dup (AD03745-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 206 | 50 | 50 | ug/L | 200 | ND | 103 | 37-156 | 0.369 | 25 | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.4* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03209 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03209-BLK1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AD03209-BS1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | 47.1 | 2.0 | 5.0 | ug/L | 50.0 | | 94.3 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **LCS Dup (AD03209-BSD1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | 53.2 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | 12.2 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| **Matrix Spike (AD03209-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Acrolein | 57.2 | 2.0 | 5.0 | ug/L | 50.0 | ND | 114 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **Matrix Spike Dup (AD03209-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Acrolein | 56.6 | 2.0 | 5.0 | ug/L | 50.0 | ND | 113 | 40-160 | 1.07 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03209 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03209-BLK1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AD03209-BS1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.3 | 0.70 | 1.0 | ug/L | 25.0 | | 101 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **LCS Dup (AD03209-BSD1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | 23.8 | 0.70 | 1.0 | ug/L | 25.0 | | 95.2 | 3-225 | 6.15 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| **Matrix Spike (AD03209-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.9 | 0.70 | 1.0 | ug/L | 25.0 | ND | 104 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **Matrix Spike Dup (AD03209-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.9 | 0.70 | 1.0 | ug/L | 25.0 | ND | 103 | 3-305 | 0.232 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03747-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.9* | | | *ug/L* | *25.0* | | *120* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03747-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | 21.5 | 0.40 | 2.0 | ug/L | 20.0 | | 108 | 60-140 | | | |
| Benzene | 19.2 | 0.30 | 0.30 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Bromoform | 25.8 | 0.30 | 0.50 | ug/L | 20.0 | | 129 | 70-130 | | | |
| Carbon tetrachloride | 25.4 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | | | |
| Chlorobenzene | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | | 99.0 | 65-135 | | | |
| Dibromochloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | | 129 | 70-135 | | | |
| Chloroethane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 95.8 | 40-160 | | | |
| Chloroform | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-135 | | | |
| Bromodichloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 65-135 | | | |
| 1,1-Dichloroethane | 19.9 | 0.30 | 0.50 | ug/L | 20.0 | | 99.6 | 70-130 | | | |
| 1,2-Dichloroethane | 23.9 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-130 | | | |
| 1,1-Dichloroethene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.2 | 50-150 | | | |
| 1,2-Dichloropropane | 18.1 | 0.40 | 0.50 | ug/L | 20.0 | | 90.7 | 35-165 | | | |
| cis-1,3-Dichloropropene | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.4 | 25-175 | | | |
| trans-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 50-150 | | | |
| Ethylbenzene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 60-140 | | | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 15-185 | | | |
| Chloromethane | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | | 122 | 2-205 | | | |
| Methylene chloride | 16.9 | 0.50 | 0.50 | ug/L | 20.0 | | 84.6 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| Tetrachloroethene | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Toluene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 70-130 | | | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | | | |
| 1,1,1-Trichloroethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| Trichloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 65-135 | | | |
| Vinyl chloride | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 117 | 5-195 | | | |
| 1,2-Dichlorobenzene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | | | |
| 1,3-Dichlorobenzene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 98.8 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *30.8* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.5* | | | *ug/L* | *25.0* | | *122* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AD03747-BSD1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | 21.5 | 0.40 | 2.0 | ug/L | 20.0 | | 107 | 60-140 | 0.279 | 25 | |
| Benzene | 19.6 | 0.30 | 0.30 | ug/L | 20.0 | | 98.0 | 65-135 | 1.90 | 25 | |
| Bromoform | 24.5 | 0.30 | 0.50 | ug/L | 20.0 | | 122 | 70-130 | 5.13 | 25 | |
| Carbon tetrachloride | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | 0.118 | 25 | |
| Chlorobenzene | 20.0 | 0.30 | 0.50 | ug/L | 20.0 | | 99.8 | 65-135 | 0.755 | 25 | |
| Dibromochloromethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-135 | 1.09 | 25 | |
| Chloroethane | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.2 | 40-160 | 2.53 | 25 | |
| Chloroform | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 70-135 | 2.04 | 25 | |
| Bromodichloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 65-135 | 0.252 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 1.40 | 25 | |
| 1,2-Dichloroethane | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 70-130 | 1.09 | 25 | |
| 1,1-Dichloroethene | 19.1 | 0.30 | 0.50 | ug/L | 20.0 | | 95.3 | 50-150 | 0.992 | 25 | |
| 1,2-Dichloropropane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | | 92.6 | 35-165 | 2.13 | 25 | |
| cis-1,3-Dichloropropene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 25-175 | 0.851 | 25 | |
| trans-1,3-Dichloropropene | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 50-150 | 0.730 | 25 | |
| Ethylbenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 60-140 | 0.615 | 25 | |
| Bromomethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 15-185 | 1.23 | 25 | |
| Chloromethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | | 124 | 2-205 | 2.07 | 25 | |
| Methylene chloride | 17.6 | 0.50 | 0.50 | ug/L | 20.0 | | 88.2 | 60-140 | 4.22 | 25 | |
| 1,1,2,2-Tetrachloroethane | 18.9 | 0.30 | 0.50 | ug/L | 20.0 | | 94.5 | 60-140 | 1.52 | 25 | |
| Tetrachloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 70-130 | 0.693 | 25 | |
| Toluene | 20.6 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 70-130 | 0.389 | 25 | |
| trans-1,2-Dichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 70-130 | 0.414 | 25 | |
| 1,1,1-Trichloroethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | 0.00 | 25 | |
| 1,1,2-Trichloroethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | 2.11 | 25 | |
| Trichloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 65-135 | 0.184 | 25 | |
| Vinyl chloride | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 5-195 | 2.43 | 25 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | 0.440 | 25 | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | 2.88 | 25 | |
| 1,4-Dichlorobenzene | 19.7 | 0.10 | 0.50 | ug/L | 20.0 | | 98.6 | 65-135 | 0.203 | 25 | |
| *Surrogate: Bromofluorobenzene* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03747-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/09/20 Analyzed: 04/11/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | ND | 119 | 40-160 | | | |
| Benzene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | ND | 103 | 37-151 | | | |
| Bromoform | 27.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 139 | 45-169 | | | |
| Carbon tetrachloride | 31.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 155 | 70-140 | | | QM-05 |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 27.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 135 | 53-149 | | | |
| Chloroethane | 24.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 14-230 | | | |
| Chloroform | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 51-138 | | | |
| Bromodichloromethane | 25.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 128 | 35-155 | | | |
| 1,1-Dichloroethane | 21.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 59-155 | | | |
| 1,2-Dichloroethane | 26.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 132 | 49-155 | | | |
| 1,1-Dichloroethene | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.0 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 17-183 | | | |
| Ethylbenzene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 37-162 | | | |
| Bromomethane | 26.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 133 | 2-242 | | | |
| Chloromethane | 27.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 137 | 2-273 | | | |
| Methylene chloride | 17.9 | 0.50 | 0.50 | ug/L | 20.0 | ND | 89.6 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 20.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.9 | 46-157 | | | |
| Tetrachloroethene | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 64-148 | | | |
| Toluene | 21.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 105 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 54-156 | | | |
| 1,1,1-Trichloroethane | 29.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 145 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 52-150 | | | |
| Trichloroethene | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 70-157 | | | |
| Vinyl chloride | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 2-251 | | | |
| 1,2-Dichlorobenzene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.1 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *31.0* | | | *ug/L* | *25.0* | | *124* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.8* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03747-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/09/20 Analyzed: 04/11/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 117 | 40-160 | 1.02 | 60 | |
| Benzene | 20.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 101 | 37-151 | 1.13 | 61 | |
| Bromoform | 26.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 134 | 45-169 | 3.77 | 42 | |
| Carbon tetrachloride | 31.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 158 | 70-140 | 2.33 | 41 | QM-05 |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0975 | 53 | |
| Dibromochloromethane | 26.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 131 | 53-149 | 3.04 | 50 | |
| Chloroethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 14-230 | 7.56 | 78 | |
| Chloroform | 25.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 128 | 51-138 | 0.662 | 54 | |
| Bromodichloromethane | 25.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 126 | 35-155 | 1.73 | 56 | |
| 1,1-Dichloroethane | 22.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 59-155 | 1.88 | 40 | |
| 1,2-Dichloroethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 49-155 | 1.79 | 49 | |
| 1,1-Dichloroethene | 22.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | 0.500 | 32 | |
| 1,2-Dichloropropane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.6 | 2-210 | 3.66 | 55 | |
| cis-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-227 | 1.41 | 58 | |
| trans-1,3-Dichloropropene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 17-183 | 3.55 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 2.67 | 63 | |
| Bromomethane | 24.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 123 | 2-242 | 7.78 | 61 | |
| Chloromethane | 25.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 126 | 2-273 | 8.87 | 60 | |
| Methylene chloride | 18.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 90.1 | 2-221 | 0.612 | 28 | |
| 1,1,2,2-Tetrachloroethane | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 96.6 | 46-157 | 3.36 | 61 | |
| Tetrachloroethene | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 64-148 | 0.255 | 39 | |
| Toluene | 21.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 105 | 47-150 | 0.0474 | 41 | |
| trans-1,2-Dichloroethene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 54-156 | 2.76 | 45 | |
| 1,1,1-Trichloroethane | 28.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 142 | 52-162 | 2.34 | 36 | |
| 1,1,2-Trichloroethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 52-150 | 2.15 | 45 | |
| Trichloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 70-157 | 1.15 | 48 | |
| Vinyl chloride | 24.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 123 | 2-251 | 1.70 | 66 | |
| 1,2-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | 2.45 | 57 | |
| 1,3-Dichlorobenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | 2.22 | 43 | |
| 1,4-Dichlorobenzene | 20.5 | 0.10 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 3.08 | 57 | |
| *Surrogate: Bromofluorobenzene* | *31.2* | | | *ug/L* | *25.0* | | *125* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *31.2* | | | *ug/L* | *25.0* | | *125* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03245-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03245-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *34.9* | | | *ug/L* | *40.0* | | *87.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *8.03* | | | *ug/L* | *40.0* | | *20.1* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.9* | | | *ug/L* | *40.0* | | *74.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.0* | | | *ug/L* | *40.0* | | *97.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *8.52* | | | *ug/L* | *40.0* | | *21.3* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *23.4* | | | *ug/L* | *40.0* | | *58.6* | *4-168* | | | |
| **LCS (AD03245-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 18.3 | 0.70 | 5.0 | ug/L | 40.0 | | 45.7 | 36-120 | | | |
| 2,4-Dichlorophenol | 32.7 | 0.70 | 5.0 | ug/L | 40.0 | | 81.8 | 53-122 | | | |
| 2,4-Dimethylphenol | 27.6 | 1.0 | 2.0 | ug/L | 50.0 | | 55.2 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 23.3 | 3.0 | 5.0 | ug/L | 40.0 | | 58.3 | 53-130 | | | |
| 2,4-Dinitrophenol | 18.1 | 5.0 | 5.0 | ug/L | 50.0 | | 36.2 | 10-173 | | | |
| 2-Nitrophenol | 24.9 | 0.90 | 10 | ug/L | 40.0 | | 62.3 | 45-167 | | | |
| 4-Nitrophenol | 12.4 | 3.0 | 10 | ug/L | 40.0 | | 31.0 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 32.0 | 1.0 | 1.0 | ug/L | 40.0 | | 79.9 | 41-128 | | | |
| 2-Methylphenol (o-cresol) | 24.2 | 0.60 | 5.0 | ug/L | 40.0 | | 60.6 | 36-102 | | | |
| Pentachlorophenol | 20.4 | 4.0 | 5.0 | ug/L | 40.0 | | 51.0 | 38-152 | | | |
| Phenol | 8.95 | 0.50 | 1.0 | ug/L | 40.0 | | 22.4 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 23.3 | 0.70 | 10 | ug/L | 40.0 | | 58.3 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 29.4 | 0.90 | 5.0 | ug/L | 40.0 | | 73.5 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 30.1 | 0.90 | 1.0 | ug/L | 40.0 | | 75.2 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.8 | 1.0 | 2.0 | ug/L | 40.0 | | 74.6 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 31.6 | 3.0 | 5.0 | ug/L | 40.0 | | 79.0 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 35.0 | 1.0 | 5.0 | ug/L | 40.0 | | 87.6 | 65-120 | | | |
| Butyl benzyl phthalate | 24.0 | 0.60 | 10 | ug/L | 40.0 | | 60.0 | 2-140 | | | |
| 2-Chloronaphthalene | 26.3 | 0.60 | 10 | ug/L | 40.0 | | 65.8 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 39.8 | 0.90 | 5.0 | ug/L | 40.0 | | 99.5 | 38-145 | | | |
| 1,2-Dichlorobenzene | 23.2 | 0.60 | 2.0 | ug/L | 40.0 | | 58.1 | 33-93 | | | |
| 1,3-Dichlorobenzene | 22.7 | 0.60 | 1.0 | ug/L | 40.0 | | 56.7 | 31-92 | | | |
| 1,4-Dichlorobenzene | 23.0 | 0.60 | 1.0 | ug/L | 40.0 | | 57.4 | 32-91 | | | |
| Diethyl phthalate | 12.5 | 0.30 | 2.0 | ug/L | 40.0 | | 31.2 | 2-120 | | | |
| Dimethyl phthalate | 7.88 | 0.80 | 2.0 | ug/L | 40.0 | | 19.7 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03245-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Di-n-butyl phthalate | 26.2 | 0.90 | 10 | ug/L | 40.0 | | 65.6 | 8-120 | | | |
| 2,4-Dinitrotoluene | 28.3 | 0.80 | 5.0 | ug/L | 40.0 | | 70.7 | 48-127 | | | |
| 2,6-Dinitrotoluene | 28.6 | 0.80 | 5.0 | ug/L | 40.0 | | 71.6 | 68-137 | | | |
| Di-n-octyl phthalate | 23.8 | 0.60 | 10 | ug/L | 40.0 | | 59.4 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 36.4 | 0.60 | 1.0 | ug/L | 40.0 | | 91.0 | 52-115 | | | |
| Hexachlorobenzene | 35.6 | 0.90 | 1.0 | ug/L | 40.0 | | 88.9 | 8-142 | | | |
| Hexachlorobutadiene | 22.8 | 0.80 | 1.0 | ug/L | 40.0 | | 56.9 | 38-120 | | | |
| Hexachlorocyclopentadiene | 19.0 | 4.0 | 5.0 | ug/L | 40.0 | | 47.4 | 16-93 | | | |
| Hexachloroethane | 28.4 | 0.60 | 1.0 | ug/L | 40.0 | | 70.9 | 55-120 | | | |
| Isophorone | 31.1 | 0.30 | 1.0 | ug/L | 40.0 | | 77.8 | 47-180 | | | |
| Nitrobenzene | 28.3 | 0.90 | 1.0 | ug/L | 40.0 | | 70.8 | 54-158 | | | |
| N-Nitrosodimethylamine | 14.0 | 0.30 | 5.0 | ug/L | 40.0 | | 34.9 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 32.8 | 0.80 | 5.0 | ug/L | 40.0 | | 82.0 | 14-198 | | | |
| N-Nitrosodiphenylamine | 37.9 | 1.0 | 1.0 | ug/L | 40.0 | | 94.8 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 24.2 | 0.60 | 5.0 | ug/L | 40.0 | | 60.6 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.3* | | | *ug/L* | *40.0* | | *93.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *7.72* | | | *ug/L* | *40.0* | | *19.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.1* | | | *ug/L* | *40.0* | | *87.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.8* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *8.69* | | | *ug/L* | *40.0* | | *21.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *27.6* | | | *ug/L* | *40.0* | | *69.0* | *4-168* | | | |
| **Matrix Spike (AD03245-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 4.66 | 0.70 | 5.0 | ug/L | 40.0 | ND | 11.6 | 23-134 | | | QM-05, J |
| 2,4-Dichlorophenol | 3.70 | 0.70 | 5.0 | ug/L | 40.0 | ND | 9.25 | 39-135 | | | QM-05, J |
| 2,4-Dimethylphenol | 13.0 | 1.0 | 2.0 | ug/L | 50.0 | ND | 26.0 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 5.04 | 3.0 | 5.0 | ug/L | 40.0 | ND | 12.6 | 7-181 | | | |
| 2,4-Dinitrophenol | 7.27 | 5.0 | 5.0 | ug/L | 50.0 | ND | 14.5 | 10-191 | | | |
| 2-Nitrophenol | 3.22 | 0.90 | 10 | ug/L | 40.0 | ND | 8.05 | 29-182 | | | QM-05, J |
| 4-Nitrophenol | 6.22 | 3.0 | 10 | ug/L | 40.0 | ND | 15.6 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 10.4 | 1.0 | 1.0 | ug/L | 40.0 | ND | 25.9 | 22-147 | | | |
| Pentachlorophenol | 7.18 | 4.0 | 5.0 | ug/L | 40.0 | ND | 18.0 | 14-176 | | | |
| 2-Methylphenol (o-cresol) | 7.20 | 0.60 | 5.0 | ug/L | 40.0 | ND | 18.0 | 9-124 | | | |
| Phenol | 7.97 | 0.50 | 1.0 | ug/L | 40.0 | 1.45 | 16.3 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 3.47 | 0.70 | 10 | ug/L | 40.0 | ND | 8.68 | 37-144 | | | QM-05, J |
| Bis(2-chloroethoxy)methane | 30.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 77.2 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 29.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 73.8 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03245-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 28.1 | 1.0 | 2.0 | ug/L | 40.0 | ND | 70.3 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 38.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 96.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 36.4 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.9 | 53-127 | | | |
| Butyl benzyl phthalate | 13.2 | 0.60 | 10 | ug/L | 40.0 | ND | 33.0 | 2-152 | | | |
| 2-Chloronaphthalene | 28.0 | 0.60 | 10 | ug/L | 40.0 | ND | 70.0 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 47.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 117 | 25-158 | | | |
| 1,2-Dichlorobenzene | 24.8 | 0.60 | 2.0 | ug/L | 40.0 | ND | 62.1 | 7-104 | | | |
| 1,4-Dichlorobenzene | 25.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 64.1 | 3-105 | | | |
| 1,3-Dichlorobenzene | 26.3 | 0.60 | 1.0 | ug/L | 40.0 | ND | 65.8 | 1-106 | | | |
| Diethyl phthalate | 7.61 | 0.30 | 2.0 | ug/L | 40.0 | ND | 19.0 | 2-120 | | | |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | | | QM-05, U |
| Di-n-butyl phthalate | 23.8 | 0.90 | 10 | ug/L | 40.0 | 2.49 | 53.2 | 1-120 | | | |
| 2,4-Dinitrotoluene | 34.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 85.1 | 39-139 | | | |
| 2,6-Dinitrotoluene | 34.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 85.8 | 50-158 | | | |
| Di-n-octyl phthalate | 10.7 | 0.60 | 10 | ug/L | 40.0 | ND | 26.8 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 39.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 99.6 | 39-116 | | | |
| Hexachlorobenzene | 35.3 | 0.90 | 1.0 | ug/L | 40.0 | ND | 88.3 | 2-152 | | | |
| Hexachlorobutadiene | 25.8 | 0.80 | 1.0 | ug/L | 40.0 | ND | 64.4 | 24-120 | | | |
| Hexachlorocyclopentadiene | 8.21 | 4.0 | 5.0 | ug/L | 40.0 | ND | 20.5 | 10-93 | | | |
| Hexachloroethane | 23.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 59.6 | 40-120 | | | |
| Isophorone | 34.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 85.3 | 21-196 | | | |
| Nitrobenzene | 32.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.5 | 35-180 | | | |
| N-Nitrosodimethylamine | 17.4 | 0.30 | 5.0 | ug/L | 40.0 | ND | 43.6 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 30.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 74.9 | 2-230 | | | |
| N-Nitrosodiphenylamine | 41.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 105 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 26.5 | 0.60 | 5.0 | ug/L | 40.0 | ND | 66.2 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *33.1* | | | *ug/L* | *40.0* | | *82.8* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *4.20* | | | *ug/L* | *40.0* | | *10.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.3* | | | *ug/L* | *40.0* | | *73.4* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *3.79* | | | *ug/L* | *40.0* | | *9.48* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *5.37* | | | *ug/L* | *40.0* | | *13.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03245-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 6.59 | 0.70 | 5.0 | ug/L | 40.0 | ND | 16.5 | 23-134 | 34.3 | 61 | QM-05 |
| 2,4-Dichlorophenol | 6.59 | 0.70 | 5.0 | ug/L | 40.0 | ND | 16.5 | 39-135 | 56.2 | 50 | QM-05, QM-08 |
| 2,4-Dimethylphenol | 15.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 30.7 | 32-120 | 16.6 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 6.98 | 3.0 | 5.0 | ug/L | 40.0 | ND | 17.4 | 7-181 | 32.3 | 203 | |
| 2,4-Dinitrophenol | 10.6 | 5.0 | 5.0 | ug/L | 50.0 | ND | 21.2 | 10-191 | 37.1 | 132 | |
| 2-Nitrophenol | 6.81 | 0.90 | 10 | ug/L | 40.0 | ND | 17.0 | 29-182 | 71.6 | 55 | QM-05, QM-08, J |
| 4-Nitrophenol | 6.96 | 3.0 | 10 | ug/L | 40.0 | ND | 17.4 | 7-132 | 11.2 | 131 | J |
| 4-Chloro-3-methylphenol | 11.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 27.6 | 22-147 | 6.54 | 73 | |
| 2-Methylphenol (o-cresol) | 8.28 | 0.60 | 5.0 | ug/L | 40.0 | ND | 20.7 | 9-124 | 14.0 | 28 | |
| Pentachlorophenol | 8.72 | 4.0 | 5.0 | ug/L | 40.0 | ND | 21.8 | 14-176 | 19.4 | 86 | |
| Phenol | 9.41 | 0.50 | 1.0 | ug/L | 40.0 | 1.45 | 19.9 | 5-120 | 16.6 | 64 | |
| 2,4,6-Trichlorophenol | 6.74 | 0.70 | 10 | ug/L | 40.0 | ND | 16.8 | 37-144 | 64.1 | 58 | QM-05, QM-08, J |
| Bis(2-chloroethoxy)methane | 29.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 73.4 | 33-184 | 5.08 | 54 | |
| Bis(2-chloroethyl)ether | 27.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 69.1 | 12-158 | 6.61 | 108 | |
| Bis(2-chloroisopropyl)ether | 27.2 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.9 | 36-166 | 3.51 | 76 | |
| Bis(2-ethylhexyl)phthalate | 49.0 | 3.0 | 5.0 | ug/L | 40.0 | ND | 122 | 8-158 | 23.7 | 82 | |
| 4-Bromophenyl phenyl ether | 33.0 | 1.0 | 5.0 | ug/L | 40.0 | ND | 82.4 | 53-127 | 9.75 | 43 | |
| Butyl benzyl phthalate | 11.2 | 0.60 | 10 | ug/L | 40.0 | ND | 28.0 | 2-152 | 16.6 | 60 | |
| 2-Chloronaphthalene | 25.9 | 0.60 | 10 | ug/L | 40.0 | ND | 64.8 | 60-120 | 7.67 | 24 | |
| 4-Chlorophenyl phenyl ether | 39.8 | 0.90 | 5.0 | ug/L | 40.0 | ND | 99.4 | 25-158 | 16.7 | 61 | |
| 1,4-Dichlorobenzene | 22.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 57.2 | 3-105 | 11.4 | 42 | |
| 1,3-Dichlorobenzene | 22.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 56.4 | 1-106 | 15.5 | 41 | |
| 1,2-Dichlorobenzene | 22.5 | 0.60 | 2.0 | ug/L | 40.0 | ND | 56.2 | 7-104 | 9.97 | 41 | |
| Diethyl phthalate | 7.37 | 0.30 | 2.0 | ug/L | 40.0 | ND | 18.4 | 2-120 | 3.20 | 100 | |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | | 183 | QM-05, U |
| Di-n-butyl phthalate | 21.6 | 0.90 | 10 | ug/L | 40.0 | 2.49 | 47.9 | 1-120 | 9.42 | 47 | |
| 2,4-Dinitrotoluene | 29.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 73.5 | 39-139 | 14.6 | 42 | |
| 2,6-Dinitrotoluene | 31.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 77.6 | 50-158 | 9.95 | 48 | |
| Di-n-octyl phthalate | 9.21 | 0.60 | 10 | ug/L | 40.0 | ND | 23.0 | 4-146 | 15.0 | 69 | J |
| 1,2-Diphenylhydrazine | 36.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 92.4 | 39-116 | 7.53 | 25 | |
| Hexachlorobenzene | 31.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 77.8 | 2-152 | 12.6 | 55 | |
| Hexachlorobutadiene | 22.9 | 0.80 | 1.0 | ug/L | 40.0 | ND | 57.4 | 24-120 | 11.5 | 62 | |
| Hexachlorocyclopentadiene | 4.56 | 4.0 | 5.0 | ug/L | 40.0 | ND | 11.4 | 10-93 | 57.2 | 55 | QM-08, J |
| Hexachloroethane | 21.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 54.0 | 40-120 | 9.91 | 52 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03245-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Isophorone | 32.7 | 0.30 | 1.0 | ug/L | 40.0 | ND | 81.7 | 21-196 | 4.31 | 93 | |
| Nitrobenzene | 29.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 72.8 | 35-180 | 11.3 | 62 | |
| N-Nitrosodimethylamine | 14.0 | 0.30 | 5.0 | ug/L | 40.0 | ND | 35.1 | 10-84 | 21.7 | 59 | |
| N-Nitrosodi-n-propylamine | 30.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 76.5 | 2-230 | 2.11 | 87 | |
| N-Nitrosodiphenylamine | 39.2 | 1.0 | 1.0 | ug/L | 40.0 | ND | 98.1 | 40-115 | 6.51 | 25 | |
| 1,2,4-Trichlorobenzene | 24.3 | 0.60 | 5.0 | ug/L | 40.0 | ND | 60.8 | 44-142 | 8.35 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *29.4* | | | *ug/L* | *40.0* | | *73.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *5.23* | | | *ug/L* | *40.0* | | *13.1* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.1* | | | *ug/L* | *40.0* | | *80.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.3* | | | *ug/L* | *40.0* | | *83.3* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *5.20* | | | *ug/L* | *40.0* | | *13.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *8.34* | | | *ug/L* | *40.0* | | *20.8* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03281 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03281-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *37.4* | | | *ug/L* | *40.0* | | *93.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.7* | | | *ug/L* | *40.0* | | *96.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.3* | | | *ug/L* | *40.0* | | *103* | *36-141* | | | |
| **LCS (AD03281-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 47.4 | 3.00 | 5.00 | ug/L | 79.4 | | 59.7 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 74.8 | 2.00 | 5.00 | ug/L | 79.4 | | 94.2 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.4* | | | *ug/L* | *40.0* | | *93.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.0* | | | *ug/L* | *40.0* | | *95.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.1* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| **Matrix Spike (AD03281-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 54.8 | 3.00 | 5.00 | ug/L | 79.4 | ND | 69.1 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 85.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 108 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.9* | | | *ug/L* | *40.0* | | *94.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.2* | | | *ug/L* | *40.0* | | *101* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.9* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| **Matrix Spike Dup (AD03281-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 53.0 | 3.00 | 5.00 | ug/L | 79.4 | ND | 66.8 | 4-262 | 3.39 | 108 | |
| 3,3´-Dichlorobenzidine | 76.8 | 2.00 | 5.00 | ug/L | 79.4 | ND | 96.7 | 4-262 | 10.8 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *35.1* | | | *ug/L* | *40.0* | | *87.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.9* | | | *ug/L* | *40.0* | | *92.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.0* | | | *ug/L* | *40.0* | | *100* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD04127-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *33.9* | | | *ug/L* | *40.0* | | *84.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *49.1* | | | *ug/L* | *40.0* | | *123* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *47.1* | | | *ug/L* | *40.0* | | *118* | *37-139* | | | |
| **LCS (AD04127-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 30.8 | 0.20 | 0.20 | ug/L | 40.0 | | 76.9 | 60-132 | | | |
| Acenaphthylene | 31.5 | 0.20 | 0.20 | ug/L | 40.0 | | 78.8 | 54-126 | | | |
| Anthracene | 33.0 | 0.090 | 0.20 | ug/L | 40.0 | | 82.4 | 43-120 | | | |
| Benzo (a) anthracene | 33.2 | 0.20 | 0.20 | ug/L | 40.0 | | 83.1 | 42-133 | | | |
| Benzo (a) pyrene | 41.5 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 32-148 | | | |
| Benzo (b) fluoranthene | 39.7 | 0.20 | 0.20 | ug/L | 40.0 | | 99.4 | 42-140 | | | |
| Benzo (g,h,i) perylene | 49.1 | 0.10 | 0.20 | ug/L | 40.0 | | 123 | 2-195 | | | |
| Benzo (k) fluoranthene | 37.8 | 0.20 | 0.20 | ug/L | 40.0 | | 94.4 | 25-146 | | | |
| Chrysene | 34.4 | 0.20 | 0.20 | ug/L | 40.0 | | 86.0 | 44-140 | | | |
| Dibenz (a,h) anthracene | 49.0 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-200 | | | |
| Fluoranthene | 27.8 | 0.070 | 0.20 | ug/L | 40.0 | | 69.6 | 43-121 | | | |
| Fluorene | 34.5 | 0.20 | 0.20 | ug/L | 40.0 | | 86.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 47.8 | 0.030 | 0.20 | ug/L | 40.0 | | 119 | 2-151 | | | |
| Naphthalene | 30.1 | 0.090 | 0.20 | ug/L | 40.0 | | 75.2 | 36-120 | | | |
| Phenanthrene | 32.4 | 0.10 | 0.20 | ug/L | 40.0 | | 81.0 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD04127-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Pyrene | 38.1 | 0.20 | 0.20 | ug/L | 40.0 | | 95.2 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.9* | | | *ug/L* | *40.0* | | *82.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.8* | | | *ug/L* | *40.0* | | *74.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *44.4* | | | *ug/L* | *40.0* | | *111* | *37-139* | | | |
| **Matrix Spike (AD04127-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 34.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 85.1 | 47-145 | | | |
| Acenaphthylene | 34.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 87.2 | 33-145 | | | |
| Anthracene | 35.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 87.5 | 27-133 | | | |
| Benzo (a) anthracene | 38.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 95.0 | 33-143 | | | |
| Benzo (a) pyrene | 45.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 114 | 17-163 | | | |
| Benzo (b) fluoranthene | 52.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 131 | 24-159 | | | |
| Benzo (g,h,i) perylene | 42.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 107 | 2-219 | | | |
| Benzo (k) fluoranthene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.5 | 11-162 | | | |
| Chrysene | 38.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.3 | 17-168 | | | |
| Dibenz (a,h) anthracene | 48.2 | 0.10 | 0.20 | ug/L | 40.0 | ND | 120 | 2-227 | | | |
| Fluoranthene | 28.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 72.2 | 26-137 | | | |
| Fluorene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.5 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 46.4 | 0.030 | 0.20 | ug/L | 40.0 | ND | 116 | 2-171 | | | |
| Naphthalene | 33.3 | 0.090 | 0.20 | ug/L | 40.0 | ND | 83.2 | 21-133 | | | |
| Phenanthrene | 24.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 60.1 | 54-120 | | | |
| Pyrene | 38.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.8 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.3* | | | *ug/L* | *40.0* | | *73.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.5* | | | *ug/L* | *40.0* | | *91.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.4* | | | *ug/L* | *40.0* | | *101* | *37-139* | | | |
| **Matrix Spike Dup (AD04127-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 30.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 75.3 | 47-145 | 12.2 | 48 | |
| Acenaphthylene | 31.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 77.4 | 33-145 | 11.9 | 74 | |
| Anthracene | 34.2 | 0.090 | 0.20 | ug/L | 40.0 | ND | 85.6 | 27-133 | 2.28 | 66 | |
| Benzo (a) anthracene | 32.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.8 | 33-143 | 14.9 | 53 | |
| Benzo (a) pyrene | 38.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.2 | 17-163 | 16.6 | 72 | |
| Benzo (b) fluoranthene | 36.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 91.6 | 24-159 | 35.5 | 71 | |
| Benzo (g,h,i) perylene | 36.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 91.7 | 2-219 | 15.0 | 97 | |
| Benzo (k) fluoranthene | 35.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.1 | 11-162 | 15.2 | 63 | |
| Chrysene | 32.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.1 | 17-168 | 18.1 | 87 | |
| Dibenz (a,h) anthracene | 35.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 89.3 | 2-227 | 29.7 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:01 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD04127-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Fluoranthene | 28.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 72.3 | 26-137 | 0.208 | 66 | |
| Fluorene | 21.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 54.5 | 59-121 | 33.6 | 38 | QM-05 |
| Indeno (1,2,3-cd) pyrene | 36.0 | 0.030 | 0.20 | ug/L | 40.0 | ND | 89.9 | 2-171 | 25.4 | 99 | |
| Naphthalene | 27.1 | 0.090 | 0.20 | ug/L | 40.0 | ND | 67.7 | 21-133 | 20.4 | 65 | |
| Phenanthrene | 23.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 58.3 | 54-120 | 3.12 | 39 | |
| Pyrene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 65.0 | 52-120 | 39.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *30.7* | | | *ug/L* | *40.0* | | *76.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *24.5* | | | *ug/L* | *40.0* | | *61.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.6* | | | *ug/L* | *40.0* | | *71.4* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:01 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-15 | The matrix spike prepared from this sample did not meet recovery and/or RPD acceptance limits. Per sections 8.1.7 and 8.3.3 of EPA methods 608.3 and 625.1, the result may not be reported or used for permitting or regulatory compliance. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| R-01a | The Method Detection Limit for this analyte has been raised to account for matrix interference. |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS.

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. 20C3733



| Company/Name: | Project ID: |
|---|---|
| Golder Associates - Sunnyvale | EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: David Walter / David C Walt

2.8°C Which

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| EMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-2d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-3 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-4d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-7 | 3-31-2020 | 1220 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-8 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| EMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-1 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| BKGD-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | | | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Sample Notes**

**TAT**

24 hr ○
48 hr ○ *Lab Approval Required*
1 wk ○
2 wk (standard) ○

Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 3/31/20 | 1608 |
| | PM | 3-31-20 | 17:55 |
| PM | PM | 3-31-20 | 20:06 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes (X) No ○

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**

**Printed: 3/31/2020 7:12:12PM**

**20C3733**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 04/15/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/31/20 21:10

Logged In By: Leslie M. Quinn — Date Logged In: 03/31/20 19:10

Samples Received at: 1.7 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C3733-01 EMSA-DMW-7 [Water] Sampled 03/31/20 12:20 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/28/20 12:20 | | |
| **20C3733-01 EMSA-DMW-7 [Water] Sampled 03/31/20 12:20 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/28/20 12:20 | | |

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| | 4.1.20 | | | 4/2/20 | 1010 |
| | 4/2/20 | | AC | 04/02/20 | 1330 |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

22 April 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: EMSA/WMSA Sampling
Work Order: 20C3735

Enclosed are the results of analyses for samples received by the laboratory on 03/31/20 20:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:17 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WMSA-DMW-4 | 20C3735-01 | Water | 03/31/20 14:25 | 03/31/20 20:06 |
| Blank - Ground Water | 20C3735-02 | Water | 03/31/20 00:00 | 03/31/20 20:06 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | 1 | AD03309 | 04/07/20 17:56 | 04/07/20 17:56 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:42 | EPA 200.8 | MB | 1551 | R-01, U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:23 | EPA 200.8 | MB | 1551 | R-01, U |
| Chromium | ND | 5.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Copper | ND | 4.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Nickel | ND | 3.0 | 5.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 13:42 | EPA 200.8 | MB | 1551 | R-01, U |
| **Selenium** | **12** | **0.60** | **4.0** | **ug/L** | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:23 | EPA 200.8 | MB | 1551 | |
| Silver | ND | 0.10 | 0.20 | ug/L | 2 | AD03199 | 04/03/20 08:40 | 04/09/20 02:23 | EPA 200.8 | MB | 1551 | R-01, U |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AD03199 | 04/03/20 08:40 | 04/09/20 01:44 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | 1 | AD03636 | 04/09/20 20:10 | 04/09/20 20:10 | EPA 218.6 | LRN | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AD03300 | 04/06/20 11:20 | 04/07/20 23:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Nickel, dissolved** | **3.5** | **3.0** | **5.0** | **ug/L** | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Selenium, dissolved** | **15** | **0.60** | **4.0** | **ug/L** | 2 | AD03300 | 04/06/20 11:20 | 04/07/20 23:25 | EPA 200.8 | SMP | 1551 | |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AD03300 | 04/06/20 11:20 | 04/07/20 23:25 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AD03300 | 04/06/20 11:20 | 04/07/20 21:51 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| **Mercury** | **0.791** | **0.200** | **0.500** | **ng/l** | 1 | AD03867 | 04/13/20 16:00 | 04/14/20 14:17 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water** | **Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | |
| **Mercury, dissolved** | **0.442** | **0.200** | **0.500** | **ng/l** | 1 | AD04058 | 04/15/20 16:00 | 04/16/20 15:12 | EPA 1631E | AJC | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Miscellaneous Physical/Conventional Chemistry Parameters

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | 1 | AD03689 | 04/10/20 08:31 | 04/10/20 14:44 | 10-204-00-1X | EV | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## TPH by EPA/LUFT GC Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | 1 | AD03282 | 04/06/20 06:44 | 04/14/20 04:48 | 8015DRO | DLD | 1551 | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | 1 | AD03282 | 04/06/20 06:44 | 04/14/20 04:48 | 8015DRO | DLD | 1551 | U |
| *Surrogate: Tetratetracontane* | | *105 %* | *39-120* | | | *AD03282* | *04/06/20 06:44* | *04/14/20 04:48* | *8015DRO* | *DLD* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## TPH by EPA/LUFT GCMS Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | 1 | AD03745 | 04/10/20 11:00 | 04/10/20 14:21 | 8260GRO | JV | 1551 | U |
| *Surrogate: Toluene-d8* | | *98.8 %* | *76-129* | | | *AD03745* | *04/10/20 11:00* | *04/10/20 14:21* | *8260GRO* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Acrolein by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | 1 | AD03209 | 04/03/20 09:00 | 04/03/20 11:16 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *105 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | 1 | AD03209 | 04/03/20 09:00 | 04/03/20 11:16 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *105 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *100 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | | | *AD03209* | *04/03/20 09:00* | *04/03/20 11:16* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:21 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *126 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:21* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *127 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:21* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *114 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:21* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blank - Ground Water (20C3735-02) Water Sampled: 03/31/20 00:00 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | 1 | AD03747 | 04/10/20 11:00 | 04/10/20 14:56 | EPA 624.1 | JV | 1551 | U |
| *Surrogate: Bromofluorobenzene* | | *126 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:56* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Dibromofluoromethane* | | *129 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:56* | *EPA 624.1* | *JV* | 1551 | |
| *Surrogate: Toluene-d8* | | *115 %* | *70-130* | | | *AD03747* | *04/10/20 11:00* | *04/10/20 14:56* | *EPA 624.1* | *JV* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| **Di-n-butyl phthalate** | **1.2** | **0.90** | **10** | **ug/L** | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | J |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | 1 | AD03245 | 04/06/20 08:00 | 04/15/20 19:27 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *94.3 %* | *27-119* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2-Fluorophenol* | | *48.3 %* | *7-85* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *83.3 %* | *15-314* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *88.3 %* | *36-141* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Phenol-d6* | | *39.7 %* | *1-65* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: 2,4,6-Tribromophenol* | | *107 %* | *4-168* | | | *AD03245* | *04/06/20 08:00* | *04/15/20 19:27* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Benzidines by EPA Method 625.1

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | 1 | AD03281 | 04/06/20 06:43 | 04/08/20 23:26 | EPA 625.1 | NBH | 1551 | U |
| 3,3′-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | 1 | AD03281 | 04/06/20 06:43 | 04/08/20 23:26 | EPA 625.1 | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *86.9 %* | *27-119* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 23:26* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *91.6 %* | *15-314* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 23:26* | *EPA 625.1* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *101 %* | *36-141* | | | *AD03281* | *04/06/20 06:43* | *04/08/20 23:26* | *EPA 625.1* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WMSA-DMW-4 (20C3735-01) Water Sampled: 03/31/20 14:25 Received: 03/31/20 20:06** | | | | | | | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | 1 | AD04127 | 04/06/20 08:00 | 04/20/20 22:06 | EPA 625.1SIM | NBH | 1551 | U |
| *Surrogate: 2-Fluorobiphenyl* | | *70.2 %* | *24-119* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 22:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: Nitrobenzene-d5* | | *75.9 %* | *15-314* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 22:06* | *EPA 625.1SIM* | *NBH* | 1551 | |
| *Surrogate: p-Terphenyl-d14* | | *115 %* | *37-139* | | | *AD04127* | *04/06/20 08:00* | *04/20/20 22:06* | *EPA 625.1SIM* | *NBH* | 1551 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03309 - General Prep** | | | | | | | | | | | |
| **Blank (AD03309-BLK1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03309-BS1)** | | | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | | 103 | 90-110 | | | |
| **Duplicate (AD03309-DUP1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03309-MS1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.96 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.6 | 90-110 | | | |
| **Matrix Spike Dup (AD03309-MSD1)** | | **Source: 20C3406-01** | | | Prepared & Analyzed: 04/07/20 | | | | | | |
| Chromium, hexavalent | 9.97 | 0.30 | 1.0 | ug/L | 10.0 | ND | 99.7 | 90-110 | 0.100 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AD03199-BLK1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03199-BS1)** | | | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 21.6 | 0.20 | 0.50 | ug/L | 20.0 | | 108 | 85-115 | | | |
| Arsenic | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Beryllium | 21.4 | 0.050 | 0.10 | ug/L | 20.0 | | 107 | 85-115 | | | |
| Cadmium | 21.2 | 0.060 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Chromium | 20.5 | 0.50 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Copper | 20.8 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 85-115 | | | |
| Lead | 21.0 | 0.060 | 0.25 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Nickel | 20.4 | 0.30 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Thallium | 21.1 | 0.050 | 0.10 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Zinc | 103 | 4.0 | 5.0 | ug/L | 100 | | 103 | 85-115 | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Antimony | 1.27 | 0.80 | 2.0 | ug/L | | 1.28 | | | 0.788 | 20 | R-01, J |
| Arsenic | ND | 1.6 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Beryllium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Cadmium | ND | 0.24 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Chromium | ND | 2.0 | 2.0 | ug/L | | ND | | | | 20 | R-01, U |
| Copper | 10.9 | 1.6 | 2.0 | ug/L | | 10.8 | | | 0.103 | 20 | |
| Lead | 1.44 | 0.24 | 1.0 | ug/L | | 1.38 | | | 3.92 | 20 | |
| Nickel | 1.65 | 1.2 | 2.0 | ug/L | | 1.78 | | | 7.60 | 20 | R-01, J |
| Selenium | ND | 1.2 | 8.0 | ug/L | | ND | | | | 20 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AD03199-DUP1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/07/20 | | | | | | |
| Silver | 0.389 | 0.20 | 0.40 | ug/L | | ND | | | 200 | 20 | R-01, J |
| Thallium | ND | 0.20 | 0.40 | ug/L | | ND | | | | 20 | R-01, U |
| Zinc | 96.5 | 16 | 20 | ug/L | | 96.0 | | | 0.490 | 20 | |
| **Matrix Spike (AD03199-MS1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.4 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 106 | 70-130 | | | |
| Arsenic | 21.0 | 1.6 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 20.9 | 0.24 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Chromium | 23.3 | 2.0 | 2.0 | ug/L | 20.0 | ND | 116 | 70-130 | | | |
| Copper | 34.2 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 117 | 70-130 | | | |
| Lead | 22.7 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 107 | 70-130 | | | |
| Nickel | 23.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 108 | 70-130 | | | |
| Selenium | 20.0 | 1.2 | 8.0 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Silver | 20.8 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Thallium | 21.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 106 | 70-130 | | | |
| Zinc | 199 | 16 | 20 | ug/L | 100 | 96.0 | 103 | 70-130 | | | |
| **Matrix Spike (AD03199-MS2)** | | **Source: 20C3319-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 20.9 | 0.80 | 2.0 | ug/L | 20.0 | 0.977 | 99.5 | 70-130 | | | |
| Arsenic | 22.0 | 1.6 | 2.0 | ug/L | 20.0 | 1.91 | 100 | 70-130 | | | |
| Beryllium | 20.7 | 0.20 | 0.40 | ug/L | 20.0 | ND | 104 | 70-130 | | | |
| Cadmium | 20.7 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 28.0 | 2.0 | 2.0 | ug/L | 20.0 | 4.72 | 116 | 70-130 | | | |
| Copper | 33.8 | 1.6 | 2.0 | ug/L | 20.0 | 13.8 | 99.9 | 70-130 | | | |
| Lead | 24.6 | 0.24 | 1.0 | ug/L | 20.0 | 3.41 | 106 | 70-130 | | | |
| Nickel | 29.4 | 1.2 | 2.0 | ug/L | 20.0 | 6.54 | 114 | 70-130 | | | |
| Selenium | 19.8 | 1.2 | 8.0 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Silver | 20.2 | 0.20 | 0.40 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Thallium | 21.0 | 0.20 | 0.40 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Zinc | 147 | 16 | 20 | ug/L | 100 | 48.9 | 98.2 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03199 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03199-MSD1)** | | **Source: 20C3320-01** | | | Prepared: 04/03/20 Analyzed: 04/08/20 | | | | | | |
| Antimony | 22.3 | 0.80 | 2.0 | ug/L | 20.0 | 1.28 | 105 | 70-130 | 0.276 | 20 | |
| Arsenic | 21.8 | 1.6 | 2.0 | ug/L | 20.0 | ND | 109 | 70-130 | 3.79 | 20 | |
| Beryllium | 20.5 | 0.20 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 0.171 | 20 | |
| Cadmium | 20.5 | 0.24 | 0.40 | ug/L | 20.0 | ND | 103 | 70-130 | 1.89 | 20 | |
| Chromium | 24.5 | 2.0 | 2.0 | ug/L | 20.0 | ND | 123 | 70-130 | 5.23 | 20 | |
| Copper | 31.8 | 1.6 | 2.0 | ug/L | 20.0 | 10.8 | 105 | 70-130 | 7.37 | 20 | |
| Lead | 22.9 | 0.24 | 1.0 | ug/L | 20.0 | 1.38 | 108 | 70-130 | 0.841 | 20 | |
| Nickel | 24.3 | 1.2 | 2.0 | ug/L | 20.0 | 1.78 | 113 | 70-130 | 4.16 | 20 | |
| Selenium | 20.2 | 1.2 | 8.0 | ug/L | 20.0 | ND | 101 | 70-130 | 0.861 | 20 | |
| Silver | 20.4 | 0.20 | 0.40 | ug/L | 20.0 | ND | 102 | 70-130 | 1.63 | 20 | |
| Thallium | 21.6 | 0.20 | 0.40 | ug/L | 20.0 | ND | 108 | 70-130 | 2.11 | 20 | |
| Zinc | 197 | 16 | 20 | ug/L | 100 | 96.0 | 101 | 70-130 | 0.940 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03636 - General Prep** | | | | | | | | | | | |
| **Blank (AD03636-BLK1)** | | | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AD03636-BS1)** | | | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.94 | 0.30 | 1.0 | ug/L | 10.0 | | 99.4 | 90-110 | | | |
| **Duplicate (AD03636-DUP1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AD03636-MS1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.64 | 0.30 | 1.0 | ug/L | 10.0 | ND | 96.4 | 90-110 | | | |
| **Matrix Spike Dup (AD03636-MSD1)** | | **Source: 20C3735-01** | | | Prepared & Analyzed: 04/09/20 | | | | | | |
| Chromium, hexavalent dissolved | 9.78 | 0.30 | 1.0 | ug/L | 10.0 | ND | 97.8 | 90-110 | 1.48 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03300 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AD03300-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | 0.0570 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AD03300-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 20.2 | 0.20 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Arsenic, dissolved | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Beryllium, dissolved | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Cadmium, dissolved | 20.1 | 0.060 | 0.10 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Chromium, dissolved | 20.0 | 0.50 | 0.50 | ug/L | 20.0 | | 99.9 | 85-115 | | | |
| Copper, dissolved | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 85-115 | | | |
| Lead, dissolved | 20.5 | 0.060 | 0.25 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Nickel, dissolved | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Selenium, dissolved | 19.6 | 0.30 | 2.0 | ug/L | 20.0 | | 98.0 | 85-115 | | | |
| Silver, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Zinc, dissolved | 97.8 | 4.0 | 5.0 | ug/L | 100 | | 97.8 | 85-115 | | | |
| **Duplicate (AD03300-DUP1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 0.257 | 0.20 | 0.50 | ug/L | | 0.271 | | | 5.56 | 20 | J |
| Arsenic, dissolved | 3.37 | 0.40 | 0.50 | ug/L | | 3.75 | | | 10.7 | 20 | |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper, dissolved | 0.914 | 0.40 | 0.50 | ug/L | | 0.915 | | | 0.123 | 20 | |
| Lead, dissolved | ND | 0.060 | 0.25 | ug/L | | ND | | | | 20 | U |
| Nickel, dissolved | 3.73 | 0.30 | 0.50 | ug/L | | 3.85 | | | 3.25 | 20 | |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03300 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AD03300-DUP1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | U |
| **MRL Check (AD03300-MRL1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Silver, dissolved | 0.203 | 0.050 | 0.10 | ug/L | 0.160 | | 127 | 0-200 | | | |
| **Matrix Spike (AD03300-MS1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 20.9 | 0.20 | 0.50 | ug/L | 20.0 | 0.271 | 103 | 70-130 | | | |
| Arsenic, dissolved | 24.2 | 0.40 | 0.50 | ug/L | 20.0 | 3.75 | 102 | 70-130 | | | |
| Beryllium, dissolved | 19.8 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.9 | 70-130 | | | |
| Cadmium, dissolved | 19.7 | 0.060 | 0.10 | ug/L | 20.0 | ND | 98.7 | 70-130 | | | |
| Chromium, dissolved | 19.6 | 0.50 | 0.50 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Copper, dissolved | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | 0.915 | 102 | 70-130 | | | |
| Lead, dissolved | 20.0 | 0.060 | 0.25 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Nickel, dissolved | 22.7 | 0.30 | 0.50 | ug/L | 20.0 | 3.85 | 94.5 | 70-130 | | | |
| Selenium, dissolved | 20.2 | 0.30 | 2.0 | ug/L | 20.0 | ND | 101 | 70-130 | | | |
| Silver, dissolved | 19.2 | 0.050 | 0.10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Thallium, dissolved | 19.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 98.0 | 70-130 | | | |
| Zinc, dissolved | 96.0 | 4.0 | 5.0 | ug/L | 100 | ND | 96.0 | 70-130 | | | |
| **Matrix Spike Dup (AD03300-MSD1)** | | **Source: 20D0233-01** | | | Prepared: 04/06/20 Analyzed: 04/07/20 | | | | | | |
| Antimony, dissolved | 21.0 | 0.20 | 0.50 | ug/L | 20.0 | 0.271 | 104 | 70-130 | 0.524 | 20 | |
| Arsenic, dissolved | 24.6 | 0.40 | 0.50 | ug/L | 20.0 | 3.75 | 104 | 70-130 | 1.59 | 20 | |
| Beryllium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | 1.88 | 20 | |
| Cadmium, dissolved | 20.3 | 0.060 | 0.10 | ug/L | 20.0 | ND | 101 | 70-130 | 2.67 | 20 | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.1 | 70-130 | 1.07 | 20 | |
| Copper, dissolved | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | 0.915 | 103 | 70-130 | 1.38 | 20 | |
| Lead, dissolved | 20.4 | 0.060 | 0.25 | ug/L | 20.0 | ND | 102 | 70-130 | 2.04 | 20 | |
| Nickel, dissolved | 23.0 | 0.30 | 0.50 | ug/L | 20.0 | 3.85 | 95.6 | 70-130 | 0.996 | 20 | |
| Selenium, dissolved | 20.7 | 0.30 | 2.0 | ug/L | 20.0 | ND | 103 | 70-130 | 2.31 | 20 | |
| Silver, dissolved | 20.0 | 0.050 | 0.10 | ug/L | 20.0 | ND | 99.9 | 70-130 | 4.07 | 20 | |
| Thallium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 3.96 | 20 | |
| Zinc, dissolved | 97.6 | 4.0 | 5.0 | ug/L | 100 | ND | 97.6 | 70-130 | 1.69 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03867 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD03867-BLK1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD03867-BS1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 4.93 | 0.200 | 0.500 | ng/l | 5.00 | | 98.5 | 77-123 | | | |
| **Matrix Spike (AD03867-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.791 | 98.6 | 71-125 | | | |
| **Matrix Spike (AD03867-MS2)** | | **Source: 20D0468-02** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 22.8 | 0.200 | 0.500 | ng/l | 25.0 | 0.439 | 89.6 | 71-125 | | | |
| **Matrix Spike Dup (AD03867-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 25.5 | 0.200 | 0.500 | ng/l | 25.0 | 0.791 | 98.8 | 71-125 | 0.118 | 24 | |
| **Matrix Spike Dup (AD03867-MSD2)** | | **Source: 20D0468-02** | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 23.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.439 | 90.2 | 71-125 | 0.698 | 24 | |
| **Reference (AD03867-SRM1)** | | | | | Prepared: 04/13/20 Analyzed: 04/14/20 | | | | | | |
| Mercury | 44.4 | 0.200 | 0.500 | ng/l | 50.0 | | 88.8 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04058 - EPA 1631** | | | | | | | | | | | |
| **Blank (AD04058-BLK1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AD04058-BS1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 4.62 | 0.200 | 0.500 | ng/l | 5.00 | | 92.4 | 77-123 | | | |
| **Matrix Spike (AD04058-MS1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 96.6 | 71-125 | | | |
| **Matrix Spike Dup (AD04058-MSD1)** | | **Source: 20C3138-03** | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 24.7 | 0.200 | 0.500 | ng/l | 25.0 | 0.239 | 97.8 | 71-125 | 1.22 | 24 | |
| **Reference (AD04058-SRM1)** | | | | | Prepared: 04/15/20 Analyzed: 04/16/20 | | | | | | |
| Mercury, dissolved | 43.2 | 0.200 | 0.500 | ng/l | 50.0 | | 86.4 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03689 - General Preparation** | | | | | | | | | | | |
| **Blank (AD03689-BLK1)** | | | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | | | | | | U |
| **LCS (AD03689-BS1)** | | | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.209 | 0.0020 | 0.0030 | mg/L | 0.200 | | 104 | 85-115 | | | |
| **Duplicate (AD03689-DUP1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | ND | 0.0020 | 0.0030 | mg/L | | ND | | | | 25 | U |
| **Matrix Spike (AD03689-MS1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.219 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 110 | 85-115 | | | |
| **Matrix Spike (AD03689-MS2)** | | **Source: 20D0433-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.204 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 102 | 85-115 | | | |
| **Matrix Spike Dup (AD03689-MSD1)** | | **Source: 20D0330-01** | | | Prepared & Analyzed: 04/10/20 | | | | | | |
| Cyanide (total) | 0.213 | 0.0020 | 0.0030 | mg/L | 0.200 | ND | 107 | 85-115 | 2.80 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## TPH by EPA/LUFT GC Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03282 - SVOAs in Water GC** | | | | | | | | | | | |
| **Blank (AD03282-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/13/20 | | | | | | |
| TPH as Diesel | ND | 50 | 250 | ug/L | | | | | | | U |
| TPH as Motor Oil | ND | 100 | 250 | ug/L | | | | | | | U |
| *Surrogate: Tetratetracontane* | *65.2* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS (AD03282-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/13/20 | | | | | | |
| TPH as Diesel | 2400 | 50 | 250 | ug/L | 2100 | | 114 | 61-120 | | | |
| *Surrogate: Tetratetracontane* | *68.6* | | | *ug/L* | *57.4* | | *120* | *39-120* | | | |
| **LCS (AD03282-BS2)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Motor Oil | 1550 | 100 | 250 | ug/L | 2010 | | 77.3 | 71-125 | | | |
| *Surrogate: Tetratetracontane* | *65.5* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS Dup (AD03282-BSD1)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Diesel | 2170 | 50 | 250 | ug/L | 2100 | | 103 | 61-120 | 9.94 | 25 | |
| *Surrogate: Tetratetracontane* | *65.2* | | | *ug/L* | *57.4* | | *114* | *39-120* | | | |
| **LCS Dup (AD03282-BSD2)** | | | | | Prepared: 04/06/20 Analyzed: 04/14/20 | | | | | | |
| TPH as Motor Oil | 1440 | 100 | 250 | ug/L | 2010 | | 71.7 | 71-125 | 7.49 | 25 | |
| *Surrogate: Tetratetracontane* | *52.9* | | | *ug/L* | *57.4* | | *92.1* | *39-120* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## TPH by EPA/LUFT GCMS Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03745 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03745-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | ND | 50 | 50 | ug/L | | | | | | | U |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.6* | *76-129* | | | |
| **LCS (AD03745-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 195 | 50 | 50 | ug/L | 200 | | 97.3 | 67-132 | | | |
| *Surrogate: Toluene-d8* | *23.6* | | | *ug/L* | *25.0* | | *94.2* | *76-129* | | | |
| **LCS Dup (AD03745-BSD1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 187 | 50 | 50 | ug/L | 200 | | 93.3 | 67-132 | 4.23 | 25 | |
| *Surrogate: Toluene-d8* | *25.0* | | | *ug/L* | *25.0* | | *99.8* | *76-129* | | | |
| **Matrix Spike (AD03745-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 206 | 50 | 50 | ug/L | 200 | ND | 103 | 37-156 | | | |
| *Surrogate: Toluene-d8* | *23.0* | | | *ug/L* | *25.0* | | *92.2* | *76-129* | | | |
| **Matrix Spike Dup (AD03745-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| TPH as Gasoline | 206 | 50 | 50 | ug/L | 200 | ND | 103 | 37-156 | 0.369 | 25 | |
| *Surrogate: Toluene-d8* | *24.4* | | | *ug/L* | *25.0* | | *97.4* | *76-129* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Acrolein by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03209 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03209-BLK1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | ND | 2.0 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AD03209-BS1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | 47.1 | 2.0 | 5.0 | ug/L | 50.0 | | 94.3 | 60-140 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **LCS Dup (AD03209-BSD1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| Acrolein | 53.2 | 2.0 | 5.0 | ug/L | 50.0 | | 106 | 60-140 | 12.2 | 25 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| **Matrix Spike (AD03209-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Acrolein | 57.2 | 2.0 | 5.0 | ug/L | 50.0 | ND | 114 | 40-160 | | | |
| *Surrogate: Bromofluorobenzene* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **Matrix Spike Dup (AD03209-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| Acrolein | 56.6 | 2.0 | 5.0 | ug/L | 50.0 | ND | 113 | 40-160 | 1.07 | 60 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## 2-Chloroethylvinyl Ether by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03209 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03209-BLK1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | ND | 0.70 | 1.0 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *25.3* | | | *ug/L* | *25.0* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *25.8* | | | *ug/L* | *25.0* | | *103* | *70-130* | | | |
| **LCS (AD03209-BS1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.3 | 0.70 | 1.0 | ug/L | 25.0 | | 101 | 3-225 | | | |
| *Surrogate: Bromofluorobenzene* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *24.8* | | | *ug/L* | *25.0* | | *99.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **LCS Dup (AD03209-BSD1)** | | | | | Prepared & Analyzed: 04/02/20 | | | | | | |
| 2-Chloroethylvinyl ether | 23.8 | 0.70 | 1.0 | ug/L | 25.0 | | 95.2 | 3-225 | 6.15 | 30 | |
| *Surrogate: Bromofluorobenzene* | *29.2* | | | *ug/L* | *25.0* | | *117* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *26.7* | | | *ug/L* | *25.0* | | *107* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |
| **Matrix Spike (AD03209-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.9 | 0.70 | 1.0 | ug/L | 25.0 | ND | 104 | 3-305 | | | |
| *Surrogate: Bromofluorobenzene* | *27.8* | | | *ug/L* | *25.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.4* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| **Matrix Spike Dup (AD03209-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/02/20 Analyzed: 04/03/20 | | | | | | |
| 2-Chloroethylvinyl ether | 25.9 | 0.70 | 1.0 | ug/L | 25.0 | ND | 103 | 3-305 | 0.232 | 71 | |
| *Surrogate: Bromofluorobenzene* | *26.6* | | | *ug/L* | *25.0* | | *106* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *26.1* | | | *ug/L* | *25.0* | | *104* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03747-BLK1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | ND | 0.40 | 2.0 | ug/L | | | | | | | U |
| Benzene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| Bromoform | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Carbon tetrachloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chlorobenzene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Dibromochloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloroform | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromodichloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1-Dichloroethene | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichloropropane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| cis-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| trans-1,3-Dichloropropene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Ethylbenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Bromomethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Chloromethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Methylene chloride | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| 1,1,2,2-Tetrachloroethane | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Tetrachloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Toluene | ND | 0.30 | 0.30 | ug/L | | | | | | | U |
| trans-1,2-Dichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,1-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,1,2-Trichloroethane | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trichloroethene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Trihalomethanes (total) | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Vinyl chloride | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.10 | 0.50 | ug/L | | | | | | | U |
| *Surrogate: Bromofluorobenzene* | *29.9* | | | *ug/L* | *25.0* | | *120* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *28.3* | | | *ug/L* | *25.0* | | *113* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03747-BS1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | 21.5 | 0.40 | 2.0 | ug/L | 20.0 | | 108 | 60-140 | | | |
| Benzene | 19.2 | 0.30 | 0.30 | ug/L | 20.0 | | 96.2 | 65-135 | | | |
| Bromoform | 25.8 | 0.30 | 0.50 | ug/L | 20.0 | | 129 | 70-130 | | | |
| Carbon tetrachloride | 25.4 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | | | |
| Chlorobenzene | 19.8 | 0.30 | 0.50 | ug/L | 20.0 | | 99.0 | 65-135 | | | |
| Dibromochloromethane | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | | 129 | 70-135 | | | |
| Chloroethane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | | 95.8 | 40-160 | | | |
| Chloroform | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-135 | | | |
| Bromodichloromethane | 23.8 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 65-135 | | | |
| 1,1-Dichloroethane | 19.9 | 0.30 | 0.50 | ug/L | 20.0 | | 99.6 | 70-130 | | | |
| 1,2-Dichloroethane | 23.9 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 70-130 | | | |
| 1,1-Dichloroethene | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.2 | 50-150 | | | |
| 1,2-Dichloropropane | 18.1 | 0.40 | 0.50 | ug/L | 20.0 | | 90.7 | 35-165 | | | |
| cis-1,3-Dichloropropene | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | | 99.4 | 25-175 | | | |
| trans-1,3-Dichloropropene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 50-150 | | | |
| Ethylbenzene | 21.2 | 0.40 | 0.50 | ug/L | 20.0 | | 106 | 60-140 | | | |
| Bromomethane | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 15-185 | | | |
| Chloromethane | 24.4 | 0.40 | 0.50 | ug/L | 20.0 | | 122 | 2-205 | | | |
| Methylene chloride | 16.9 | 0.50 | 0.50 | ug/L | 20.0 | | 84.6 | 60-140 | | | |
| 1,1,2,2-Tetrachloroethane | 19.2 | 0.30 | 0.50 | ug/L | 20.0 | | 96.0 | 60-140 | | | |
| Tetrachloroethene | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| Toluene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 70-130 | | | |
| trans-1,2-Dichloroethene | 19.4 | 0.40 | 0.50 | ug/L | 20.0 | | 96.8 | 70-130 | | | |
| 1,1,1-Trichloroethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | | | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 70-130 | | | |
| Trichloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 65-135 | | | |
| Vinyl chloride | 23.3 | 0.40 | 0.50 | ug/L | 20.0 | | 117 | 5-195 | | | |
| 1,2-Dichlorobenzene | 20.5 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 65-135 | | | |
| 1,3-Dichlorobenzene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | | 108 | 70-130 | | | |
| 1,4-Dichlorobenzene | 19.8 | 0.10 | 0.50 | ug/L | 20.0 | | 98.8 | 65-135 | | | |
| *Surrogate: Bromofluorobenzene* | *30.8* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.5* | | | *ug/L* | *25.0* | | *122* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.5* | | | *ug/L* | *25.0* | | *110* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **LCS Dup (AD03747-BSD1)** | | | | | Prepared: 04/09/20 Analyzed: 04/10/20 | | | | | | |
| Acrylonitrile | 21.5 | 0.40 | 2.0 | ug/L | 20.0 | | 107 | 60-140 | 0.279 | 25 | |
| Benzene | 19.6 | 0.30 | 0.30 | ug/L | 20.0 | | 98.0 | 65-135 | 1.90 | 25 | |
| Bromoform | 24.5 | 0.30 | 0.50 | ug/L | 20.0 | | 122 | 70-130 | 5.13 | 25 | |
| Carbon tetrachloride | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | 0.118 | 25 | |
| Chlorobenzene | 20.0 | 0.30 | 0.50 | ug/L | 20.0 | | 99.8 | 65-135 | 0.755 | 25 | |
| Dibromochloromethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-135 | 1.09 | 25 | |
| Chloroethane | 19.6 | 0.40 | 0.50 | ug/L | 20.0 | | 98.2 | 40-160 | 2.53 | 25 | |
| Chloroform | 23.2 | 0.40 | 0.50 | ug/L | 20.0 | | 116 | 70-135 | 2.04 | 25 | |
| Bromodichloromethane | 23.7 | 0.40 | 0.50 | ug/L | 20.0 | | 119 | 65-135 | 0.252 | 25 | |
| 1,1-Dichloroethane | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 70-130 | 1.40 | 25 | |
| 1,2-Dichloroethane | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | | 118 | 70-130 | 1.09 | 25 | |
| 1,1-Dichloroethene | 19.1 | 0.30 | 0.50 | ug/L | 20.0 | | 95.3 | 50-150 | 0.992 | 25 | |
| 1,2-Dichloropropane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | | 92.6 | 35-165 | 2.13 | 25 | |
| cis-1,3-Dichloropropene | 20.0 | 0.40 | 0.50 | ug/L | 20.0 | | 100 | 25-175 | 0.851 | 25 | |
| trans-1,3-Dichloropropene | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 50-150 | 0.730 | 25 | |
| Ethylbenzene | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 60-140 | 0.615 | 25 | |
| Bromomethane | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | | 110 | 15-185 | 1.23 | 25 | |
| Chloromethane | 24.9 | 0.40 | 0.50 | ug/L | 20.0 | | 124 | 2-205 | 2.07 | 25 | |
| Methylene chloride | 17.6 | 0.50 | 0.50 | ug/L | 20.0 | | 88.2 | 60-140 | 4.22 | 25 | |
| 1,1,2,2-Tetrachloroethane | 18.9 | 0.30 | 0.50 | ug/L | 20.0 | | 94.5 | 60-140 | 1.52 | 25 | |
| Tetrachloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 70-130 | 0.693 | 25 | |
| Toluene | 20.6 | 0.30 | 0.30 | ug/L | 20.0 | | 103 | 70-130 | 0.389 | 25 | |
| trans-1,2-Dichloroethene | 19.3 | 0.40 | 0.50 | ug/L | 20.0 | | 96.4 | 70-130 | 0.414 | 25 | |
| 1,1,1-Trichloroethane | 25.5 | 0.40 | 0.50 | ug/L | 20.0 | | 127 | 70-130 | 0.00 | 25 | |
| 1,1,2-Trichloroethane | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | | 103 | 70-130 | 2.11 | 25 | |
| Trichloroethene | 21.7 | 0.40 | 0.50 | ug/L | 20.0 | | 109 | 65-135 | 0.184 | 25 | |
| Vinyl chloride | 22.8 | 0.40 | 0.50 | ug/L | 20.0 | | 114 | 5-195 | 2.43 | 25 | |
| 1,2-Dichlorobenzene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 65-135 | 0.440 | 25 | |
| 1,3-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | | 104 | 70-130 | 2.88 | 25 | |
| 1,4-Dichlorobenzene | 19.7 | 0.10 | 0.50 | ug/L | 20.0 | | 98.6 | 65-135 | 0.203 | 25 | |
| *Surrogate: Bromofluorobenzene* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.2* | | | *ug/L* | *25.0* | | *121* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.3* | | | *ug/L* | *25.0* | | *109* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03747-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/09/20 Analyzed: 04/11/20 | | | | | | |
| Acrylonitrile | 23.7 | 0.40 | 2.0 | ug/L | 20.0 | ND | 119 | 40-160 | | | |
| Benzene | 20.5 | 0.30 | 0.30 | ug/L | 20.0 | ND | 103 | 37-151 | | | |
| Bromoform | 27.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 139 | 45-169 | | | |
| Carbon tetrachloride | 31.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 155 | 70-140 | | | QM-05 |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 103 | 37-160 | | | |
| Dibromochloromethane | 27.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 135 | 53-149 | | | |
| Chloroethane | 24.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 122 | 14-230 | | | |
| Chloroform | 25.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 129 | 51-138 | | | |
| Bromodichloromethane | 25.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 128 | 35-155 | | | |
| 1,1-Dichloroethane | 21.6 | 0.30 | 0.50 | ug/L | 20.0 | ND | 108 | 59-155 | | | |
| 1,2-Dichloroethane | 26.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 132 | 49-155 | | | |
| 1,1-Dichloroethene | 21.9 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | | | |
| 1,2-Dichloropropane | 19.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 96.0 | 2-210 | | | |
| cis-1,3-Dichloropropene | 20.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 2-227 | | | |
| trans-1,3-Dichloropropene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 17-183 | | | |
| Ethylbenzene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 37-162 | | | |
| Bromomethane | 26.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 133 | 2-242 | | | |
| Chloromethane | 27.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 137 | 2-273 | | | |
| Methylene chloride | 17.9 | 0.50 | 0.50 | ug/L | 20.0 | ND | 89.6 | 2-221 | | | |
| 1,1,2,2-Tetrachloroethane | 20.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 99.9 | 46-157 | | | |
| Tetrachloroethene | 23.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 64-148 | | | |
| Toluene | 21.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 105 | 47-150 | | | |
| trans-1,2-Dichloroethene | 21.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 54-156 | | | |
| 1,1,1-Trichloroethane | 29.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 145 | 52-162 | | | |
| 1,1,2-Trichloroethane | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 106 | 52-150 | | | |
| Trichloroethene | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 70-157 | | | |
| Vinyl chloride | 25.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 125 | 2-251 | | | |
| 1,2-Dichlorobenzene | 21.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 107 | 18-190 | | | |
| 1,3-Dichlorobenzene | 22.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 114 | 59-156 | | | |
| 1,4-Dichlorobenzene | 21.1 | 0.10 | 0.50 | ug/L | 20.0 | ND | 106 | 18-190 | | | |
| *Surrogate: Bromofluorobenzene* | *31.0* | | | *ug/L* | *25.0* | | *124* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *30.8* | | | *ug/L* | *25.0* | | *123* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.0* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Volatile Organic Compounds by EPA Method 624.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03747 - VOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03747-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/09/20 Analyzed: 04/11/20 | | | | | | |
| Acrylonitrile | 23.5 | 0.40 | 2.0 | ug/L | 20.0 | ND | 117 | 40-160 | 1.02 | 60 | |
| Benzene | 20.3 | 0.30 | 0.30 | ug/L | 20.0 | ND | 101 | 37-151 | 1.13 | 61 | |
| Bromoform | 26.8 | 0.30 | 0.50 | ug/L | 20.0 | ND | 134 | 45-169 | 3.77 | 42 | |
| Carbon tetrachloride | 31.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 158 | 70-140 | 2.33 | 41 | QM-05 |
| Chlorobenzene | 20.5 | 0.30 | 0.50 | ug/L | 20.0 | ND | 102 | 37-160 | 0.0975 | 53 | |
| Dibromochloromethane | 26.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 131 | 53-149 | 3.04 | 50 | |
| Chloroethane | 22.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 113 | 14-230 | 7.56 | 78 | |
| Chloroform | 25.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 128 | 51-138 | 0.662 | 54 | |
| Bromodichloromethane | 25.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 126 | 35-155 | 1.73 | 56 | |
| 1,1-Dichloroethane | 22.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 59-155 | 1.88 | 40 | |
| 1,2-Dichloroethane | 26.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 130 | 49-155 | 1.79 | 49 | |
| 1,1-Dichloroethene | 22.0 | 0.30 | 0.50 | ug/L | 20.0 | ND | 110 | 2-234 | 0.500 | 32 | |
| 1,2-Dichloropropane | 18.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 92.6 | 2-210 | 3.66 | 55 | |
| cis-1,3-Dichloropropene | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 102 | 2-227 | 1.41 | 58 | |
| trans-1,3-Dichloropropene | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 17-183 | 3.55 | 86 | |
| Ethylbenzene | 21.8 | 0.40 | 0.50 | ug/L | 20.0 | ND | 109 | 37-162 | 2.67 | 63 | |
| Bromomethane | 24.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 123 | 2-242 | 7.78 | 61 | |
| Chloromethane | 25.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 126 | 2-273 | 8.87 | 60 | |
| Methylene chloride | 18.0 | 0.50 | 0.50 | ug/L | 20.0 | ND | 90.1 | 2-221 | 0.612 | 28 | |
| 1,1,2,2-Tetrachloroethane | 19.3 | 0.30 | 0.50 | ug/L | 20.0 | ND | 96.6 | 46-157 | 3.36 | 61 | |
| Tetrachloroethene | 23.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 118 | 64-148 | 0.255 | 39 | |
| Toluene | 21.1 | 0.30 | 0.30 | ug/L | 20.0 | ND | 105 | 47-150 | 0.0474 | 41 | |
| trans-1,2-Dichloroethene | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 54-156 | 2.76 | 45 | |
| 1,1,1-Trichloroethane | 28.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 142 | 52-162 | 2.34 | 36 | |
| 1,1,2-Trichloroethane | 20.7 | 0.40 | 0.50 | ug/L | 20.0 | ND | 103 | 52-150 | 2.15 | 45 | |
| Trichloroethene | 22.4 | 0.40 | 0.50 | ug/L | 20.0 | ND | 112 | 70-157 | 1.15 | 48 | |
| Vinyl chloride | 24.5 | 0.40 | 0.50 | ug/L | 20.0 | ND | 123 | 2-251 | 1.70 | 66 | |
| 1,2-Dichlorobenzene | 20.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 105 | 18-190 | 2.45 | 57 | |
| 1,3-Dichlorobenzene | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 59-156 | 2.22 | 43 | |
| 1,4-Dichlorobenzene | 20.5 | 0.10 | 0.50 | ug/L | 20.0 | ND | 102 | 18-190 | 3.08 | 57 | |
| *Surrogate: Bromofluorobenzene* | *31.2* | | | *ug/L* | *25.0* | | *125* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *31.2* | | | *ug/L* | *25.0* | | *125* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *27.1* | | | *ug/L* | *25.0* | | *108* | *70-130* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03245-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dichlorophenol | ND | 0.70 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dimethylphenol | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| 4,6-Dinitro-2-methylphenol | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 2,4-Dinitrophenol | ND | 5.0 | 5.0 | ug/L | | | | | | | U |
| 2-Nitrophenol | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 4-Nitrophenol | ND | 3.0 | 10 | ug/L | | | | | | | U |
| 4-Chloro-3-methylphenol | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| Pentachlorophenol | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| 2-Methylphenol (o-cresol) | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| Phenol | ND | 0.50 | 1.0 | ug/L | | | | | | | U |
| 2,4,6-Trichlorophenol | ND | 0.70 | 10 | ug/L | | | | | | | U |
| Bis(2-chloroethoxy)methane | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| Bis(2-chloroethyl)ether | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Bis(2-chloroisopropyl)ether | ND | 1.0 | 2.0 | ug/L | | | | | | | U |
| Bis(2-ethylhexyl)phthalate | ND | 3.0 | 5.0 | ug/L | | | | | | | U |
| 4-Bromophenyl phenyl ether | ND | 1.0 | 5.0 | ug/L | | | | | | | U |
| Butyl benzyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 2-Chloronaphthalene | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 4-Chlorophenyl phenyl ether | ND | 0.90 | 5.0 | ug/L | | | | | | | U |
| 1,3-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,4-Dichlorobenzene | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| 1,2-Dichlorobenzene | ND | 0.60 | 2.0 | ug/L | | | | | | | U |
| Diethyl phthalate | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | | | | | | | U |
| Di-n-butyl phthalate | ND | 0.90 | 10 | ug/L | | | | | | | U |
| 2,4-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| 2,6-Dinitrotoluene | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| Di-n-octyl phthalate | ND | 0.60 | 10 | ug/L | | | | | | | U |
| 1,2-Diphenylhydrazine | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |
| Hexachlorobutadiene | ND | 0.80 | 1.0 | ug/L | | | | | | | U |
| Hexachlorocyclopentadiene | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| Hexachloroethane | ND | 0.60 | 1.0 | ug/L | | | | | | | U |
| Isophorone | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| Nitrobenzene | ND | 0.90 | 1.0 | ug/L | | | | | | | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03245-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| N-Nitrosodimethylamine | ND | 0.30 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodi-n-propylamine | ND | 0.80 | 5.0 | ug/L | | | | | | | U |
| N-Nitrosodiphenylamine | ND | 1.0 | 1.0 | ug/L | | | | | | | U |
| 1,2,4-Trichlorobenzene | ND | 0.60 | 5.0 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *34.9* | | | *ug/L* | *40.0* | | *87.3* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *8.03* | | | *ug/L* | *40.0* | | *20.1* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.9* | | | *ug/L* | *40.0* | | *74.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *39.0* | | | *ug/L* | *40.0* | | *97.6* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *8.52* | | | *ug/L* | *40.0* | | *21.3* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *23.4* | | | *ug/L* | *40.0* | | *58.6* | *4-168* | | | |
| **LCS (AD03245-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 18.3 | 0.70 | 5.0 | ug/L | 40.0 | | 45.7 | 36-120 | | | |
| 2,4-Dichlorophenol | 32.7 | 0.70 | 5.0 | ug/L | 40.0 | | 81.8 | 53-122 | | | |
| 2,4-Dimethylphenol | 27.6 | 1.0 | 2.0 | ug/L | 50.0 | | 55.2 | 42-120 | | | |
| 4,6-Dinitro-2-methylphenol | 23.3 | 3.0 | 5.0 | ug/L | 40.0 | | 58.3 | 53-130 | | | |
| 2,4-Dinitrophenol | 18.1 | 5.0 | 5.0 | ug/L | 50.0 | | 36.2 | 10-173 | | | |
| 2-Nitrophenol | 24.9 | 0.90 | 10 | ug/L | 40.0 | | 62.3 | 45-167 | | | |
| 4-Nitrophenol | 12.4 | 3.0 | 10 | ug/L | 40.0 | | 31.0 | 13-129 | | | |
| 4-Chloro-3-methylphenol | 32.0 | 1.0 | 1.0 | ug/L | 40.0 | | 79.9 | 41-128 | | | |
| Pentachlorophenol | 20.4 | 4.0 | 5.0 | ug/L | 40.0 | | 51.0 | 38-152 | | | |
| 2-Methylphenol (o-cresol) | 24.2 | 0.60 | 5.0 | ug/L | 40.0 | | 60.6 | 36-102 | | | |
| Phenol | 8.95 | 0.50 | 1.0 | ug/L | 40.0 | | 22.4 | 17-120 | | | |
| 2,4,6-Trichlorophenol | 23.3 | 0.70 | 10 | ug/L | 40.0 | | 58.3 | 52-129 | | | |
| Bis(2-chloroethoxy)methane | 29.4 | 0.90 | 5.0 | ug/L | 40.0 | | 73.5 | 49-165 | | | |
| Bis(2-chloroethyl)ether | 30.1 | 0.90 | 1.0 | ug/L | 40.0 | | 75.2 | 43-126 | | | |
| Bis(2-chloroisopropyl)ether | 29.8 | 1.0 | 2.0 | ug/L | 40.0 | | 74.6 | 63-139 | | | |
| Bis(2-ethylhexyl)phthalate | 31.6 | 3.0 | 5.0 | ug/L | 40.0 | | 79.0 | 29-137 | | | |
| 4-Bromophenyl phenyl ether | 35.0 | 1.0 | 5.0 | ug/L | 40.0 | | 87.6 | 65-120 | | | |
| Butyl benzyl phthalate | 24.0 | 0.60 | 10 | ug/L | 40.0 | | 60.0 | 2-140 | | | |
| 2-Chloronaphthalene | 26.3 | 0.60 | 10 | ug/L | 40.0 | | 65.8 | 65-120 | | | |
| 4-Chlorophenyl phenyl ether | 39.8 | 0.90 | 5.0 | ug/L | 40.0 | | 99.5 | 38-145 | | | |
| 1,3-Dichlorobenzene | 22.7 | 0.60 | 1.0 | ug/L | 40.0 | | 56.7 | 31-92 | | | |
| 1,4-Dichlorobenzene | 23.0 | 0.60 | 1.0 | ug/L | 40.0 | | 57.4 | 32-91 | | | |
| 1,2-Dichlorobenzene | 23.2 | 0.60 | 2.0 | ug/L | 40.0 | | 58.1 | 33-93 | | | |
| Diethyl phthalate | 12.5 | 0.30 | 2.0 | ug/L | 40.0 | | 31.2 | 2-120 | | | |
| Dimethyl phthalate | 7.88 | 0.80 | 2.0 | ug/L | 40.0 | | 19.7 | 2-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD03245-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Di-n-butyl phthalate | 26.2 | 0.90 | 10 | ug/L | 40.0 | | 65.6 | 8-120 | | | |
| 2,4-Dinitrotoluene | 28.3 | 0.80 | 5.0 | ug/L | 40.0 | | 70.7 | 48-127 | | | |
| 2,6-Dinitrotoluene | 28.6 | 0.80 | 5.0 | ug/L | 40.0 | | 71.6 | 68-137 | | | |
| Di-n-octyl phthalate | 23.8 | 0.60 | 10 | ug/L | 40.0 | | 59.4 | 19-132 | | | |
| 1,2-Diphenylhydrazine | 36.4 | 0.60 | 1.0 | ug/L | 40.0 | | 91.0 | 52-115 | | | |
| Hexachlorobenzene | 35.6 | 0.90 | 1.0 | ug/L | 40.0 | | 88.9 | 8-142 | | | |
| Hexachlorobutadiene | 22.8 | 0.80 | 1.0 | ug/L | 40.0 | | 56.9 | 38-120 | | | |
| Hexachlorocyclopentadiene | 19.0 | 4.0 | 5.0 | ug/L | 40.0 | | 47.4 | 16-93 | | | |
| Hexachloroethane | 28.4 | 0.60 | 1.0 | ug/L | 40.0 | | 70.9 | 55-120 | | | |
| Isophorone | 31.1 | 0.30 | 1.0 | ug/L | 40.0 | | 77.8 | 47-180 | | | |
| Nitrobenzene | 28.3 | 0.90 | 1.0 | ug/L | 40.0 | | 70.8 | 54-158 | | | |
| N-Nitrosodimethylamine | 14.0 | 0.30 | 5.0 | ug/L | 40.0 | | 34.9 | 19-81 | | | |
| N-Nitrosodi-n-propylamine | 32.8 | 0.80 | 5.0 | ug/L | 40.0 | | 82.0 | 14-198 | | | |
| N-Nitrosodiphenylamine | 37.9 | 1.0 | 1.0 | ug/L | 40.0 | | 94.8 | 54-111 | | | |
| 1,2,4-Trichlorobenzene | 24.2 | 0.60 | 5.0 | ug/L | 40.0 | | 60.6 | 57-130 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.3* | | | *ug/L* | *40.0* | | *93.2* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *7.72* | | | *ug/L* | *40.0* | | *19.3* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.1* | | | *ug/L* | *40.0* | | *87.7* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.8* | | | *ug/L* | *40.0* | | *102* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *8.69* | | | *ug/L* | *40.0* | | *21.7* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *27.6* | | | *ug/L* | *40.0* | | *69.0* | *4-168* | | | |
| **Matrix Spike (AD03245-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 4.66 | 0.70 | 5.0 | ug/L | 40.0 | ND | 11.6 | 23-134 | | | QM-05, J |
| 2,4-Dichlorophenol | 3.70 | 0.70 | 5.0 | ug/L | 40.0 | ND | 9.25 | 39-135 | | | QM-05, J |
| 2,4-Dimethylphenol | 13.0 | 1.0 | 2.0 | ug/L | 50.0 | ND | 26.0 | 32-120 | | | QM-05 |
| 4,6-Dinitro-2-methylphenol | 5.04 | 3.0 | 5.0 | ug/L | 40.0 | ND | 12.6 | 7-181 | | | |
| 2,4-Dinitrophenol | 7.27 | 5.0 | 5.0 | ug/L | 50.0 | ND | 14.5 | 10-191 | | | |
| 2-Nitrophenol | 3.22 | 0.90 | 10 | ug/L | 40.0 | ND | 8.05 | 29-182 | | | QM-05, J |
| 4-Nitrophenol | 6.22 | 3.0 | 10 | ug/L | 40.0 | ND | 15.6 | 7-132 | | | J |
| 4-Chloro-3-methylphenol | 10.4 | 1.0 | 1.0 | ug/L | 40.0 | ND | 25.9 | 22-147 | | | |
| 2-Methylphenol (o-cresol) | 7.20 | 0.60 | 5.0 | ug/L | 40.0 | ND | 18.0 | 9-124 | | | |
| Pentachlorophenol | 7.18 | 4.0 | 5.0 | ug/L | 40.0 | ND | 18.0 | 14-176 | | | |
| Phenol | 7.97 | 0.50 | 1.0 | ug/L | 40.0 | 1.45 | 16.3 | 5-120 | | | |
| 2,4,6-Trichlorophenol | 3.47 | 0.70 | 10 | ug/L | 40.0 | ND | 8.68 | 37-144 | | | QM-05, J |
| Bis(2-chloroethoxy)methane | 30.9 | 0.90 | 5.0 | ug/L | 40.0 | ND | 77.2 | 33-184 | | | |
| Bis(2-chloroethyl)ether | 29.5 | 0.90 | 1.0 | ug/L | 40.0 | ND | 73.8 | 12-158 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike (AD03245-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Bis(2-chloroisopropyl)ether | 28.1 | 1.0 | 2.0 | ug/L | 40.0 | ND | 70.3 | 36-166 | | | |
| Bis(2-ethylhexyl)phthalate | 38.6 | 3.0 | 5.0 | ug/L | 40.0 | ND | 96.4 | 8-158 | | | |
| 4-Bromophenyl phenyl ether | 36.4 | 1.0 | 5.0 | ug/L | 40.0 | ND | 90.9 | 53-127 | | | |
| Butyl benzyl phthalate | 13.2 | 0.60 | 10 | ug/L | 40.0 | ND | 33.0 | 2-152 | | | |
| 2-Chloronaphthalene | 28.0 | 0.60 | 10 | ug/L | 40.0 | ND | 70.0 | 60-120 | | | |
| 4-Chlorophenyl phenyl ether | 47.0 | 0.90 | 5.0 | ug/L | 40.0 | ND | 117 | 25-158 | | | |
| 1,4-Dichlorobenzene | 25.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 64.1 | 3-105 | | | |
| 1,3-Dichlorobenzene | 26.3 | 0.60 | 1.0 | ug/L | 40.0 | ND | 65.8 | 1-106 | | | |
| 1,2-Dichlorobenzene | 24.8 | 0.60 | 2.0 | ug/L | 40.0 | ND | 62.1 | 7-104 | | | |
| Diethyl phthalate | 7.61 | 0.30 | 2.0 | ug/L | 40.0 | ND | 19.0 | 2-120 | | | |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | | | QM-05, U |
| Di-n-butyl phthalate | 23.8 | 0.90 | 10 | ug/L | 40.0 | 2.49 | 53.2 | 1-120 | | | |
| 2,4-Dinitrotoluene | 34.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 85.1 | 39-139 | | | |
| 2,6-Dinitrotoluene | 34.3 | 0.80 | 5.0 | ug/L | 40.0 | ND | 85.8 | 50-158 | | | |
| Di-n-octyl phthalate | 10.7 | 0.60 | 10 | ug/L | 40.0 | ND | 26.8 | 4-146 | | | |
| 1,2-Diphenylhydrazine | 39.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 99.6 | 39-116 | | | |
| Hexachlorobenzene | 35.3 | 0.90 | 1.0 | ug/L | 40.0 | ND | 88.3 | 2-152 | | | |
| Hexachlorobutadiene | 25.8 | 0.80 | 1.0 | ug/L | 40.0 | ND | 64.4 | 24-120 | | | |
| Hexachlorocyclopentadiene | 8.21 | 4.0 | 5.0 | ug/L | 40.0 | ND | 20.5 | 10-93 | | | |
| Hexachloroethane | 23.8 | 0.60 | 1.0 | ug/L | 40.0 | ND | 59.6 | 40-120 | | | |
| Isophorone | 34.1 | 0.30 | 1.0 | ug/L | 40.0 | ND | 85.3 | 21-196 | | | |
| Nitrobenzene | 32.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 81.5 | 35-180 | | | |
| N-Nitrosodimethylamine | 17.4 | 0.30 | 5.0 | ug/L | 40.0 | ND | 43.6 | 10-84 | | | |
| N-Nitrosodi-n-propylamine | 30.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 74.9 | 2-230 | | | |
| N-Nitrosodiphenylamine | 41.9 | 1.0 | 1.0 | ug/L | 40.0 | ND | 105 | 40-115 | | | |
| 1,2,4-Trichlorobenzene | 26.5 | 0.60 | 5.0 | ug/L | 40.0 | ND | 66.2 | 44-142 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *33.1* | | | *ug/L* | *40.0* | | *82.8* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *4.20* | | | *ug/L* | *40.0* | | *10.5* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *35.8* | | | *ug/L* | *40.0* | | *89.5* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *29.3* | | | *ug/L* | *40.0* | | *73.4* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *3.79* | | | *ug/L* | *40.0* | | *9.48* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *5.37* | | | *ug/L* | *40.0* | | *13.4* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03245-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| 2-Chlorophenol | 6.59 | 0.70 | 5.0 | ug/L | 40.0 | ND | 16.5 | 23-134 | 34.3 | 61 | QM-05 |
| 2,4-Dichlorophenol | 6.59 | 0.70 | 5.0 | ug/L | 40.0 | ND | 16.5 | 39-135 | 56.2 | 50 | QM-05, QM-08 |
| 2,4-Dimethylphenol | 15.3 | 1.0 | 2.0 | ug/L | 50.0 | ND | 30.7 | 32-120 | 16.6 | 58 | QM-05 |
| 4,6-Dinitro-2-methylphenol | 6.98 | 3.0 | 5.0 | ug/L | 40.0 | ND | 17.4 | 7-181 | 32.3 | 203 | |
| 2,4-Dinitrophenol | 10.6 | 5.0 | 5.0 | ug/L | 50.0 | ND | 21.2 | 10-191 | 37.1 | 132 | |
| 2-Nitrophenol | 6.81 | 0.90 | 10 | ug/L | 40.0 | ND | 17.0 | 29-182 | 71.6 | 55 | QM-05, QM-08, J |
| 4-Nitrophenol | 6.96 | 3.0 | 10 | ug/L | 40.0 | ND | 17.4 | 7-132 | 11.2 | 131 | J |
| 4-Chloro-3-methylphenol | 11.0 | 1.0 | 1.0 | ug/L | 40.0 | ND | 27.6 | 22-147 | 6.54 | 73 | |
| Pentachlorophenol | 8.72 | 4.0 | 5.0 | ug/L | 40.0 | ND | 21.8 | 14-176 | 19.4 | 86 | |
| 2-Methylphenol (o-cresol) | 8.28 | 0.60 | 5.0 | ug/L | 40.0 | ND | 20.7 | 9-124 | 14.0 | 28 | |
| Phenol | 9.41 | 0.50 | 1.0 | ug/L | 40.0 | 1.45 | 19.9 | 5-120 | 16.6 | 64 | |
| 2,4,6-Trichlorophenol | 6.74 | 0.70 | 10 | ug/L | 40.0 | ND | 16.8 | 37-144 | 64.1 | 58 | QM-05, QM-08, J |
| Bis(2-chloroethoxy)methane | 29.4 | 0.90 | 5.0 | ug/L | 40.0 | ND | 73.4 | 33-184 | 5.08 | 54 | |
| Bis(2-chloroethyl)ether | 27.6 | 0.90 | 1.0 | ug/L | 40.0 | ND | 69.1 | 12-158 | 6.61 | 108 | |
| Bis(2-chloroisopropyl)ether | 27.2 | 1.0 | 2.0 | ug/L | 40.0 | ND | 67.9 | 36-166 | 3.51 | 76 | |
| Bis(2-ethylhexyl)phthalate | 49.0 | 3.0 | 5.0 | ug/L | 40.0 | ND | 122 | 8-158 | 23.7 | 82 | |
| 4-Bromophenyl phenyl ether | 33.0 | 1.0 | 5.0 | ug/L | 40.0 | ND | 82.4 | 53-127 | 9.75 | 43 | |
| Butyl benzyl phthalate | 11.2 | 0.60 | 10 | ug/L | 40.0 | ND | 28.0 | 2-152 | 16.6 | 60 | |
| 2-Chloronaphthalene | 25.9 | 0.60 | 10 | ug/L | 40.0 | ND | 64.8 | 60-120 | 7.67 | 24 | |
| 4-Chlorophenyl phenyl ether | 39.8 | 0.90 | 5.0 | ug/L | 40.0 | ND | 99.4 | 25-158 | 16.7 | 61 | |
| 1,2-Dichlorobenzene | 22.5 | 0.60 | 2.0 | ug/L | 40.0 | ND | 56.2 | 7-104 | 9.97 | 41 | |
| 1,3-Dichlorobenzene | 22.5 | 0.60 | 1.0 | ug/L | 40.0 | ND | 56.4 | 1-106 | 15.5 | 41 | |
| 1,4-Dichlorobenzene | 22.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 57.2 | 3-105 | 11.4 | 42 | |
| Diethyl phthalate | 7.37 | 0.30 | 2.0 | ug/L | 40.0 | ND | 18.4 | 2-120 | 3.20 | 100 | |
| Dimethyl phthalate | ND | 0.80 | 2.0 | ug/L | 40.0 | ND | | 2-120 | | 183 | QM-05, U |
| Di-n-butyl phthalate | 21.6 | 0.90 | 10 | ug/L | 40.0 | 2.49 | 47.9 | 1-120 | 9.42 | 47 | |
| 2,4-Dinitrotoluene | 29.4 | 0.80 | 5.0 | ug/L | 40.0 | ND | 73.5 | 39-139 | 14.6 | 42 | |
| 2,6-Dinitrotoluene | 31.0 | 0.80 | 5.0 | ug/L | 40.0 | ND | 77.6 | 50-158 | 9.95 | 48 | |
| Di-n-octyl phthalate | 9.21 | 0.60 | 10 | ug/L | 40.0 | ND | 23.0 | 4-146 | 15.0 | 69 | J |
| 1,2-Diphenylhydrazine | 36.9 | 0.60 | 1.0 | ug/L | 40.0 | ND | 92.4 | 39-116 | 7.53 | 25 | |
| Hexachlorobenzene | 31.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 77.8 | 2-152 | 12.6 | 55 | |
| Hexachlorobutadiene | 22.9 | 0.80 | 1.0 | ug/L | 40.0 | ND | 57.4 | 24-120 | 11.5 | 62 | |
| Hexachlorocyclopentadiene | 4.56 | 4.0 | 5.0 | ug/L | 40.0 | ND | 11.4 | 10-93 | 57.2 | 55 | QM-08, J |
| Hexachloroethane | 21.6 | 0.60 | 1.0 | ug/L | 40.0 | ND | 54.0 | 40-120 | 9.91 | 52 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03245 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD03245-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/15/20 | | | | | | |
| Isophorone | 32.7 | 0.30 | 1.0 | ug/L | 40.0 | ND | 81.7 | 21-196 | 4.31 | 93 | |
| Nitrobenzene | 29.1 | 0.90 | 1.0 | ug/L | 40.0 | ND | 72.8 | 35-180 | 11.3 | 62 | |
| N-Nitrosodimethylamine | 14.0 | 0.30 | 5.0 | ug/L | 40.0 | ND | 35.1 | 10-84 | 21.7 | 59 | |
| N-Nitrosodi-n-propylamine | 30.6 | 0.80 | 5.0 | ug/L | 40.0 | ND | 76.5 | 2-230 | 2.11 | 87 | |
| N-Nitrosodiphenylamine | 39.2 | 1.0 | 1.0 | ug/L | 40.0 | ND | 98.1 | 40-115 | 6.51 | 25 | |
| 1,2,4-Trichlorobenzene | 24.3 | 0.60 | 5.0 | ug/L | 40.0 | ND | 60.8 | 44-142 | 8.35 | 50 | |
| *Surrogate: 2-Fluorobiphenyl* | *29.4* | | | *ug/L* | *40.0* | | *73.6* | *27-119* | | | |
| *Surrogate: 2-Fluorophenol* | *5.23* | | | *ug/L* | *40.0* | | *13.1* | *7-85* | | | |
| *Surrogate: Nitrobenzene-d5* | *32.1* | | | *ug/L* | *40.0* | | *80.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *33.3* | | | *ug/L* | *40.0* | | *83.3* | *36-141* | | | |
| *Surrogate: Phenol-d6* | *5.20* | | | *ug/L* | *40.0* | | *13.0* | *1-65* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *8.34* | | | *ug/L* | *40.0* | | *20.8* | *4-168* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Benzidines by EPA Method 625.1 - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD03281 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD03281-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | ND | 3.00 | 5.00 | ug/L | | | | | | | U |
| 3,3´-Dichlorobenzidine | ND | 2.00 | 5.00 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *37.4* | | | *ug/L* | *40.0* | | *93.5* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.7* | | | *ug/L* | *40.0* | | *96.8* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.3* | | | *ug/L* | *40.0* | | *103* | *36-141* | | | |
| **LCS (AD03281-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 47.4 | 3.00 | 5.00 | ug/L | 79.4 | | 59.7 | 12-151 | | | |
| 3,3´-Dichlorobenzidine | 74.8 | 2.00 | 5.00 | ug/L | 79.4 | | 94.2 | 8-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.4* | | | *ug/L* | *40.0* | | *93.6* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *38.0* | | | *ug/L* | *40.0* | | *95.0* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *42.1* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| **Matrix Spike (AD03281-MS1)** | | **Source: 20C3735-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 54.8 | 3.00 | 5.00 | ug/L | 79.4 | ND | 69.1 | 4-262 | | | |
| 3,3´-Dichlorobenzidine | 85.6 | 2.00 | 5.00 | ug/L | 79.4 | ND | 108 | 4-262 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *37.9* | | | *ug/L* | *40.0* | | *94.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *40.2* | | | *ug/L* | *40.0* | | *101* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *41.9* | | | *ug/L* | *40.0* | | *105* | *36-141* | | | |
| **Matrix Spike Dup (AD03281-MSD1)** | | **Source: 20C3735-01** | | | Prepared: 04/06/20 Analyzed: 04/08/20 | | | | | | |
| Benzidine | 53.0 | 3.00 | 5.00 | ug/L | 79.4 | ND | 66.8 | 4-262 | 3.39 | 108 | |
| 3,3´-Dichlorobenzidine | 76.8 | 2.00 | 5.00 | ug/L | 79.4 | ND | 96.7 | 4-262 | 10.8 | 108 | |
| *Surrogate: 2-Fluorobiphenyl* | *35.1* | | | *ug/L* | *40.0* | | *87.8* | *27-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.9* | | | *ug/L* | *40.0* | | *92.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.0* | | | *ug/L* | *40.0* | | *100* | *36-141* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Blank (AD04127-BLK1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Acenaphthylene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Anthracene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) anthracene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (a) pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (b) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Benzo (g,h,i) perylene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Benzo (k) fluoranthene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Chrysene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Dibenz (a,h) anthracene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Fluoranthene | ND | 0.070 | 0.20 | ug/L | | | | | | | U |
| Fluorene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| Indeno (1,2,3-cd) pyrene | ND | 0.030 | 0.20 | ug/L | | | | | | | U |
| Naphthalene | ND | 0.090 | 0.20 | ug/L | | | | | | | U |
| Phenanthrene | ND | 0.10 | 0.20 | ug/L | | | | | | | U |
| Pyrene | ND | 0.20 | 0.20 | ug/L | | | | | | | U |
| *Surrogate: 2-Fluorobiphenyl* | *33.9* | | | *ug/L* | *40.0* | | *84.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *49.1* | | | *ug/L* | *40.0* | | *123* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *47.1* | | | *ug/L* | *40.0* | | *118* | *37-139* | | | |
| **LCS (AD04127-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 30.8 | 0.20 | 0.20 | ug/L | 40.0 | | 76.9 | 60-132 | | | |
| Acenaphthylene | 31.5 | 0.20 | 0.20 | ug/L | 40.0 | | 78.8 | 54-126 | | | |
| Anthracene | 33.0 | 0.090 | 0.20 | ug/L | 40.0 | | 82.4 | 43-120 | | | |
| Benzo (a) anthracene | 33.2 | 0.20 | 0.20 | ug/L | 40.0 | | 83.1 | 42-133 | | | |
| Benzo (a) pyrene | 41.5 | 0.20 | 0.20 | ug/L | 40.0 | | 104 | 32-148 | | | |
| Benzo (b) fluoranthene | 39.7 | 0.20 | 0.20 | ug/L | 40.0 | | 99.4 | 42-140 | | | |
| Benzo (g,h,i) perylene | 49.1 | 0.10 | 0.20 | ug/L | 40.0 | | 123 | 2-195 | | | |
| Benzo (k) fluoranthene | 37.8 | 0.20 | 0.20 | ug/L | 40.0 | | 94.4 | 25-146 | | | |
| Chrysene | 34.4 | 0.20 | 0.20 | ug/L | 40.0 | | 86.0 | 44-140 | | | |
| Dibenz (a,h) anthracene | 49.0 | 0.10 | 0.20 | ug/L | 40.0 | | 122 | 2-200 | | | |
| Fluoranthene | 27.8 | 0.070 | 0.20 | ug/L | 40.0 | | 69.6 | 43-121 | | | |
| Fluorene | 34.5 | 0.20 | 0.20 | ug/L | 40.0 | | 86.2 | 70-120 | | | |
| Indeno (1,2,3-cd) pyrene | 47.8 | 0.030 | 0.20 | ug/L | 40.0 | | 119 | 2-151 | | | |
| Naphthalene | 30.1 | 0.090 | 0.20 | ug/L | 40.0 | | 75.2 | 36-120 | | | |
| Phenanthrene | 32.4 | 0.10 | 0.20 | ug/L | 40.0 | | 81.0 | 65-120 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **LCS (AD04127-BS1)** | | | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Pyrene | 38.1 | 0.20 | 0.20 | ug/L | 40.0 | | 95.2 | 70-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *32.9* | | | *ug/L* | *40.0* | | *82.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *29.8* | | | *ug/L* | *40.0* | | *74.4* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *44.4* | | | *ug/L* | *40.0* | | *111* | *37-139* | | | |
| **Matrix Spike (AD04127-MS1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 34.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 85.1 | 47-145 | | | |
| Acenaphthylene | 34.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 87.2 | 33-145 | | | |
| Anthracene | 35.0 | 0.090 | 0.20 | ug/L | 40.0 | ND | 87.5 | 27-133 | | | |
| Benzo (a) anthracene | 38.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 95.0 | 33-143 | | | |
| Benzo (a) pyrene | 45.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 114 | 17-163 | | | |
| Benzo (b) fluoranthene | 52.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 131 | 24-159 | | | |
| Benzo (g,h,i) perylene | 42.6 | 0.10 | 0.20 | ug/L | 40.0 | ND | 107 | 2-219 | | | |
| Benzo (k) fluoranthene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.5 | 11-162 | | | |
| Chrysene | 38.9 | 0.20 | 0.20 | ug/L | 40.0 | ND | 97.3 | 17-168 | | | |
| Dibenz (a,h) anthracene | 48.2 | 0.10 | 0.20 | ug/L | 40.0 | ND | 120 | 2-227 | | | |
| Fluoranthene | 28.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 72.2 | 26-137 | | | |
| Fluorene | 30.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 76.5 | 59-121 | | | |
| Indeno (1,2,3-cd) pyrene | 46.4 | 0.030 | 0.20 | ug/L | 40.0 | ND | 116 | 2-171 | | | |
| Naphthalene | 33.3 | 0.090 | 0.20 | ug/L | 40.0 | ND | 83.2 | 21-133 | | | |
| Phenanthrene | 24.0 | 0.10 | 0.20 | ug/L | 40.0 | ND | 60.1 | 54-120 | | | |
| Pyrene | 38.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.8 | 52-120 | | | |
| *Surrogate: 2-Fluorobiphenyl* | *29.3* | | | *ug/L* | *40.0* | | *73.3* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *36.5* | | | *ug/L* | *40.0* | | *91.2* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *40.4* | | | *ug/L* | *40.0* | | *101* | *37-139* | | | |
| **Matrix Spike Dup (AD04127-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Acenaphthene | 30.1 | 0.20 | 0.20 | ug/L | 40.0 | ND | 75.3 | 47-145 | 12.2 | 48 | |
| Acenaphthylene | 31.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 77.4 | 33-145 | 11.9 | 74 | |
| Anthracene | 34.2 | 0.090 | 0.20 | ug/L | 40.0 | ND | 85.6 | 27-133 | 2.28 | 66 | |
| Benzo (a) anthracene | 32.7 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.8 | 33-143 | 14.9 | 53 | |
| Benzo (a) pyrene | 38.5 | 0.20 | 0.20 | ug/L | 40.0 | ND | 96.2 | 17-163 | 16.6 | 72 | |
| Benzo (b) fluoranthene | 36.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 91.6 | 24-159 | 35.5 | 71 | |
| Benzo (g,h,i) perylene | 36.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 91.7 | 2-219 | 15.0 | 97 | |
| Benzo (k) fluoranthene | 35.6 | 0.20 | 0.20 | ug/L | 40.0 | ND | 89.1 | 11-162 | 15.2 | 63 | |
| Chrysene | 32.4 | 0.20 | 0.20 | ug/L | 40.0 | ND | 81.1 | 17-168 | 18.1 | 87 | |
| Dibenz (a,h) anthracene | 35.7 | 0.10 | 0.20 | ug/L | 40.0 | ND | 89.3 | 2-227 | 29.7 | 126 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 04/22/20 14:17 |

## Semivolatile Organic Compounds by EPA Method 625.1 SIM - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AD04127 - SVOAs in Water GCMS** | | | | | | | | | | | |
| **Matrix Spike Dup (AD04127-MSD1)** | | **Source: 20C3733-01** | | | Prepared: 04/06/20 Analyzed: 04/20/20 | | | | | | |
| Fluoranthene | 28.9 | 0.070 | 0.20 | ug/L | 40.0 | ND | 72.3 | 26-137 | 0.208 | 66 | |
| Fluorene | 21.8 | 0.20 | 0.20 | ug/L | 40.0 | ND | 54.5 | 59-121 | 33.6 | 38 | QM-05 |
| Indeno (1,2,3-cd) pyrene | 36.0 | 0.030 | 0.20 | ug/L | 40.0 | ND | 89.9 | 2-171 | 25.4 | 99 | |
| Naphthalene | 27.1 | 0.090 | 0.20 | ug/L | 40.0 | ND | 67.7 | 21-133 | 20.4 | 65 | |
| Phenanthrene | 23.3 | 0.10 | 0.20 | ug/L | 40.0 | ND | 58.3 | 54-120 | 3.12 | 39 | |
| Pyrene | 26.0 | 0.20 | 0.20 | ug/L | 40.0 | ND | 65.0 | 52-120 | 39.3 | 49 | |
| *Surrogate: 2-Fluorobiphenyl* | *30.7* | | | *ug/L* | *40.0* | | *76.7* | *24-119* | | | |
| *Surrogate: Nitrobenzene-d5* | *24.5* | | | *ug/L* | *40.0* | | *61.3* | *15-314* | | | |
| *Surrogate: p-Terphenyl-d14* | *28.6* | | | *ug/L* | *40.0* | | *71.4* | *37-139* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | EMSA/WMSA Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 04/22/20 14:17 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-08 | The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

**Corporate Laboratory**
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

**Bay Area Laboratory**
6398 Dougherty Road, #35, Dublin, CA 94568
925-828-6226 F) 925-828-6309

**Central Valley Laboratory**
9090 Union [illegible] Wy., #113, Elk Grove, CA 95624
91[illegible]-5190 F) 916-686-5192

# Work Order
# Chain of Custody Record

Lab No. 2003135



| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** EMSA/WMSA Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

2.8°C ukiah

**Field Sampler - Print Name & Signature:** David Walter / David C Walt

| Sample Identification | Sample Collection Date | Time | Container: 40ml Vial | Poly | Glass | Sleeve | Other | Preservative: HCL | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | 624 CTR Group List | 625 CTR SVOC (no PNA) | 625 CTR PNA SIM | Cyanide Low Level 3ppb | 8015 TPH D/MO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | J Flag | Equis EDD | Geotracker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WMSA-DMW-1s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| WMSA-DMW-1d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-2 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-3d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-4 | 3-31-2020 | 1425 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-5 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-6 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-7 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8s | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-8d | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-9 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-10 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| WMSA-DMW-11 | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | | | |
| Blank - Ground Water | 3-31-2020 | - | 2 | | | | | | | | | 2 | | | | x | | | | | | | | | | | | |

**Sample Notes**

**TAT**
- 24 hr
- 48 hr
- Lab Approval Required
- 1 wk
- 2 wk (standard) ✓

Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | [signature] | 3/31/20 | 1608 |
| [signature] | [signature] | 3-31-20 | 17:55 |
| [signature] | [signature] | 3-31-20 | 20:06 |
| | | | |

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report: Yes (X) No ( )

Sampling Company Log Code:

Global ID: EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |

**WORK ORDER**



**20C3735**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** EMSA/WMSA Sampling | **Project Number:** Ground Water |

Date Due: 04/15/20 15:00 (10 day TAT)

Received By: Pete L. Hathaway — Date Received: 03/31/20 21:00

Logged In By: Leslie M. Quinn — Date Logged In: 03/31/20 19:16

Samples Received at: 1.3 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20C3735-01 EMSA-DMW-4 [Water] Sampled 03/31/20 14:25 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 | BAL Metals | 04/28/20 14:25 | | |
| **20C3735-01 EMSA-DMW-4 [Water] Sampled 03/31/20 14:25 (GMT-08:00) Pacifi** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 04/28/20 14:25 | | |

| | | | | | |
|---|---|---|---|---|---|
| [signature] | 4.1.20 | | [signature] | 4/2/20 | 1010 |
| Relinquished By | Date | Time | Received By | Date | Time |
| [signature] | 4/2/20 | | AC | 04/02/20 | 1330 |
| Relinquished By | Date | Time | Received By | Date | Time |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

01 June 2020

Golder Associates - Sunnyvale
Attn: George Wegmann
425 Lakeside Drive
Sunnyvale, CA 94085
RE: SEEP Sampling
Work Order: 20E0497

Enclosed are the results of analyses for samples received by the laboratory on 05/05/20 20:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette Poplin

Jeanette L. Poplin For Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 06/01/20 09:08 |

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | T: 925-828-6226 | F: 925-828-6309 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | T: 916-686-5190 | F: 916-686-5192 | ELAP# 2922
North Bay: 110 Liberty Street | Petaluma, CA 94952 | T: 707-769-3128 | F: 707-769-8093 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | T: 760-930-2555 | F: 760-930-2510 | ELAP# 3055

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| WC-Seep-A | 20E0497-01 | Water | 05/05/20 12:15 | 05/05/20 20:45 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water Sampled: 05/05/20 12:15 Received: 05/05/20 20:45** | | | | | | | | | | | | |
| **Chromium, hexavalent** | **0.43** | **0.30** | **1.0** | **ug/L** | 1 | AE03264 | 05/08/20 18:38 | 05/08/20 18:38 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water Sampled: 05/05/20 12:15 Received: 05/05/20 20:45** | | | | | | | | | | | | |
| Antimony | ND | 2.0 | 5.0 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | R-01, U |
| Arsenic | ND | 4.0 | 5.0 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | R-01, U |
| Beryllium | ND | 0.50 | 1.0 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | U |
| Cadmium | ND | 0.12 | 0.20 | ug/L | 2 | AE03148 | 05/07/20 08:35 | 05/20/20 00:04 | EPA 200.8 | MB | 1551 | R-01, U |
| **Chromium** | **5.1** | **5.0** | **5.0** | **ug/L** | 10 | AE03148 | 05/07/20 08:35 | 05/08/20 22:30 | EPA 200.8 | SMP | 1551 | |
| **Copper** | **4.8** | **4.0** | **5.0** | **ug/L** | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | R-01, J |
| Lead | ND | 0.60 | 2.5 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | R-01, U |
| **Nickel** | **6.4** | **3.0** | **5.0** | **ug/L** | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | |
| **Selenium** | **1.0** | **0.60** | **4.0** | **ug/L** | 2 | AE03148 | 05/07/20 08:35 | 05/08/20 23:50 | EPA 200.8 | SMP | 1551 | R-01, J |
| **Silver** | **0.12** | **0.10** | **0.20** | **ug/L** | 2 | AE03148 | 05/07/20 08:35 | 05/08/20 23:50 | EPA 200.8 | SMP | 1551 | R-01, J |
| Thallium | ND | 0.50 | 1.0 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/08/20 22:30 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc | ND | 40 | 50 | ug/L | 10 | AE03148 | 05/07/20 08:35 | 05/19/20 23:49 | EPA 200.8 | MB | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by EPA 200 Series Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water** | **Sampled: 05/05/20 12:15** | | **Received: 05/05/20 20:45** | | | | | | | | | |
| **Chromium, hexavalent dissolved** | **0.39** | **0.30** | **1.0** | **ug/L** | 1 | AE03266 | 05/08/20 22:21 | 05/08/20 22:21 | EPA 218.6 | LRN | 1551 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water** | **Sampled: 05/05/20 12:15** | | **Received: 05/05/20 20:45** | | | | | | | | | |
| Antimony, dissolved | ND | 2.0 | 5.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Arsenic, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Beryllium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Cadmium, dissolved | ND | 0.12 | 0.20 | ug/L | 2 | AE03361 | 05/12/20 08:50 | 05/13/20 16:39 | EPA 200.8 | SMP | 1551 | R-01, U |
| Chromium, dissolved | ND | 5.0 | 5.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Copper, dissolved | ND | 4.0 | 5.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Lead, dissolved | ND | 0.60 | 2.5 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Nickel, dissolved | ND | 3.0 | 5.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| **Selenium, dissolved** | **0.95** | **0.60** | **4.0** | **ug/L** | 2 | AE03361 | 05/12/20 08:50 | 05/14/20 13:47 | EPA 200.8 | SMP | 1551 | R-01, J |
| Silver, dissolved | ND | 0.10 | 0.20 | ug/L | 2 | AE03361 | 05/12/20 08:50 | 05/13/20 16:39 | EPA 200.8 | SMP | 1551 | R-01, U |
| Thallium, dissolved | ND | 0.50 | 1.0 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |
| Zinc, dissolved | ND | 40 | 50 | ug/L | 10 | AE03361 | 05/12/20 08:50 | 05/13/20 16:21 | EPA 200.8 | SMP | 1551 | R-01, U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water** | **Sampled: 05/05/20 12:15** | | **Received: 05/05/20 20:45** | | | | | | | | | |
| **Mercury** | **6.25** | **2.00** | **5.00** | **ng/l** | 10 | AE03329 | 05/11/20 19:30 | 05/12/20 15:19 | EPA 1631E | AJC | 2728 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by APHA/EPA Methods

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Analyst | ELAP # | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WC-Seep-A (20E0497-01) Water** | **Sampled: 05/05/20 12:15** | | **Received: 05/05/20 20:45** | | | | | | | | | |
| **Mercury, dissolved** | **0.381** | **0.200** | **0.500** | **ng/l** | 1 | AE04067 | 05/26/20 15:00 | 05/27/20 14:25 | EPA 1631E | NPS | 2728 | J |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03264 - General Prep** | | | | | | | | | | | |
| **Blank (AE03264-BLK1)** | | | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AE03264-BS1)** | | | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | | 102 | 90-110 | | | |
| **Duplicate (AE03264-DUP1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent | 0.475 | 0.30 | 1.0 | ug/L | | 0.426 | | | 10.9 | 20 | J |
| **Matrix Spike (AE03264-MS1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | 0.426 | 98.8 | 90-110 | | | |
| **Matrix Spike Dup (AE03264-MSD1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent | 10.2 | 0.30 | 1.0 | ug/L | 10.0 | 0.426 | 98.1 | 90-110 | 0.711 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03148 - EPA 200.8** | | | | | | | | | | | |
| **Blank (AE03148-BLK1)** | | | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Lead | ND | 0.060 | 0.25 | ug/L | | | | | | | U |
| Nickel | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver | 0.0695 | 0.050 | 0.10 | ug/L | | | | | | | J |
| Thallium | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AE03148-BS1)** | | | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | 20.4 | 0.20 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Arsenic | 21.1 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Beryllium | 20.5 | 0.050 | 0.10 | ug/L | 20.0 | | 103 | 85-115 | | | |
| Cadmium | 19.6 | 0.060 | 0.10 | ug/L | 20.0 | | 97.9 | 85-115 | | | |
| Chromium | 20.2 | 0.50 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Copper | 21.0 | 0.40 | 0.50 | ug/L | 20.0 | | 105 | 85-115 | | | |
| Lead | 19.1 | 0.060 | 0.25 | ug/L | 20.0 | | 95.7 | 85-115 | | | |
| Nickel | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Selenium | 20.4 | 0.30 | 2.0 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Silver | 19.3 | 0.050 | 0.10 | ug/L | 20.0 | | 96.6 | 85-115 | | | |
| Thallium | 19.1 | 0.050 | 0.10 | ug/L | 20.0 | | 95.6 | 85-115 | | | |
| Zinc | 97.3 | 4.0 | 5.0 | ug/L | 100 | | 97.3 | 85-115 | | | |
| **Duplicate (AE03148-DUP1)** | | **Source: 20E0484-01** | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | 0.385 | 0.20 | 0.50 | ug/L | | 0.405 | | | 5.11 | 20 | J |
| Arsenic | ND | 0.40 | 0.50 | ug/L | | ND | | | | 20 | U |
| Beryllium | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium | ND | 0.50 | 0.50 | ug/L | | ND | | | | 20 | U |
| Copper | 7.79 | 0.40 | 0.50 | ug/L | | 7.88 | | | 1.13 | 20 | |
| Lead | ND | 0.060 | 0.25 | ug/L | | ND | | | | 20 | U |
| Nickel | 9.21 | 0.30 | 0.50 | ug/L | | 9.29 | | | 0.784 | 20 | |
| Selenium | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03148 - EPA 200.8** | | | | | | | | | | | |
| **Duplicate (AE03148-DUP1)** | | **Source: 20E0484-01** | | | Prepared: 05/07/20 Analyzed: 05/11/20 | | | | | | |
| Silver | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Thallium | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc | 40.2 | 4.0 | 5.0 | ug/L | | 36.1 | | | 10.8 | 20 | |
| **Matrix Spike (AE03148-MS1)** | | **Source: 20E0484-01** | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | 21.2 | 0.20 | 0.50 | ug/L | 20.0 | 0.405 | 104 | 70-130 | | | |
| Arsenic | 21.6 | 0.40 | 0.50 | ug/L | 20.0 | ND | 108 | 70-130 | | | |
| Beryllium | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Cadmium | 19.2 | 0.060 | 0.10 | ug/L | 20.0 | ND | 95.9 | 70-130 | | | |
| Chromium | 19.5 | 0.50 | 0.50 | ug/L | 20.0 | ND | 97.7 | 70-130 | | | |
| Copper | 28.1 | 0.40 | 0.50 | ug/L | 20.0 | 7.88 | 101 | 70-130 | | | |
| Lead | 18.5 | 0.060 | 0.25 | ug/L | 20.0 | ND | 92.3 | 70-130 | | | |
| Nickel | 27.2 | 0.30 | 0.50 | ug/L | 20.0 | 9.29 | 89.8 | 70-130 | | | |
| Selenium | 20.6 | 0.30 | 2.0 | ug/L | 20.0 | ND | 103 | 70-130 | | | |
| Silver | 18.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 90.3 | 70-130 | | | |
| Thallium | 18.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 92.8 | 70-130 | | | |
| Zinc | 126 | 4.0 | 5.0 | ug/L | 100 | 36.1 | 90.3 | 70-130 | | | |
| **Matrix Spike (AE03148-MS2)** | | **Source: 20E0480-01** | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | 21.3 | 0.20 | 0.50 | ug/L | 20.0 | 0.384 | 105 | 70-130 | | | |
| Arsenic | 22.1 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 70-130 | | | |
| Beryllium | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | | | |
| Cadmium | 19.4 | 0.060 | 0.10 | ug/L | 20.0 | ND | 97.0 | 70-130 | | | |
| Chromium | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.0 | 70-130 | | | |
| Copper | 28.4 | 0.40 | 0.50 | ug/L | 20.0 | 8.06 | 102 | 70-130 | | | |
| Lead | 18.9 | 0.060 | 0.25 | ug/L | 20.0 | ND | 94.5 | 70-130 | | | |
| Nickel | 27.5 | 0.30 | 0.50 | ug/L | 20.0 | 9.16 | 91.9 | 70-130 | | | |
| Selenium | 21.0 | 0.30 | 2.0 | ug/L | 20.0 | ND | 105 | 70-130 | | | |
| Silver | 17.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 89.5 | 70-130 | | | |
| Thallium | 18.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 94.4 | 70-130 | | | |
| Zinc | 123 | 4.0 | 5.0 | ug/L | 100 | 31.2 | 91.5 | 70-130 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03148 - EPA 200.8** | | | | | | | | | | | |
| **Matrix Spike Dup (AE03148-MSD1)** | | **Source: 20E0484-01** | | | Prepared: 05/07/20 Analyzed: 05/08/20 | | | | | | |
| Antimony | 21.4 | 0.20 | 0.50 | ug/L | 20.0 | 0.405 | 105 | 70-130 | 0.866 | 20 | |
| Arsenic | 22.2 | 0.40 | 0.50 | ug/L | 20.0 | ND | 111 | 70-130 | 2.48 | 20 | |
| Beryllium | 20.6 | 0.050 | 0.10 | ug/L | 20.0 | ND | 103 | 70-130 | 2.66 | 20 | |
| Cadmium | 19.4 | 0.060 | 0.10 | ug/L | 20.0 | ND | 97.2 | 70-130 | 1.39 | 20 | |
| Chromium | 19.9 | 0.50 | 0.50 | ug/L | 20.0 | ND | 99.6 | 70-130 | 1.91 | 20 | |
| Copper | 28.9 | 0.40 | 0.50 | ug/L | 20.0 | 7.88 | 105 | 70-130 | 2.86 | 20 | |
| Lead | 19.0 | 0.060 | 0.25 | ug/L | 20.0 | ND | 94.9 | 70-130 | 2.82 | 20 | |
| Nickel | 28.0 | 0.30 | 0.50 | ug/L | 20.0 | 9.29 | 93.5 | 70-130 | 2.68 | 20 | |
| Selenium | 21.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 106 | 70-130 | 2.65 | 20 | |
| Silver | 18.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 90.7 | 70-130 | 0.477 | 20 | |
| Thallium | 18.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 94.7 | 70-130 | 2.04 | 20 | |
| Zinc | 129 | 4.0 | 5.0 | ug/L | 100 | 36.1 | 93.2 | 70-130 | 2.31 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03266 - General Prep** | | | | | | | | | | | |
| **Blank (AE03266-BLK1)** | | | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent dissolved | ND | 0.30 | 1.0 | ug/L | | | | | | | U |
| **LCS (AE03266-BS1)** | | | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.1 | 0.30 | 1.0 | ug/L | 10.0 | | 101 | 90-110 | | | |
| **Duplicate (AE03266-DUP1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent dissolved | 0.391 | 0.30 | 1.0 | ug/L | | 0.386 | | | 1.29 | 20 | J |
| **Matrix Spike (AE03266-MS1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.4 | 0.30 | 1.0 | ug/L | 10.0 | 0.386 | 100 | 90-110 | | | |
| **Matrix Spike Dup (AE03266-MSD1)** | | **Source: 20E0497-01** | | | Prepared & Analyzed: 05/08/20 | | | | | | |
| Chromium, hexavalent dissolved | 10.3 | 0.30 | 1.0 | ug/L | 10.0 | 0.386 | 99.2 | 90-110 | 0.937 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03361 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Blank (AE03361-BLK1)** | | | | | Prepared: 05/12/20 Analyzed: 05/13/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | | | | | | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | | | | | | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | | | | | | U |
| Chromium, dissolved | ND | 0.50 | 0.50 | ug/L | | | | | | | U |
| Copper, dissolved | 0.674 | 0.40 | 0.50 | ug/L | | | | | | | |
| Lead, dissolved | 0.0833 | 0.060 | 0.25 | ug/L | | | | | | | J |
| Nickel, dissolved | ND | 0.30 | 0.50 | ug/L | | | | | | | U |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | | | | | | U |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | | | | | | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | | | | | | U |
| **LCS (AE03361-BS1)** | | | | | Prepared: 05/12/20 Analyzed: 05/13/20 | | | | | | |
| Antimony, dissolved | 19.9 | 0.20 | 0.50 | ug/L | 20.0 | | 99.4 | 85-115 | | | |
| Arsenic, dissolved | 20.1 | 0.40 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Beryllium, dissolved | 20.3 | 0.050 | 0.10 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Cadmium, dissolved | 19.5 | 0.060 | 0.10 | ug/L | 20.0 | | 97.5 | 85-115 | | | |
| Chromium, dissolved | 20.2 | 0.50 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Copper, dissolved | 20.4 | 0.40 | 0.50 | ug/L | 20.0 | | 102 | 85-115 | | | |
| Lead, dissolved | 20.1 | 0.060 | 0.25 | ug/L | 20.0 | | 100 | 85-115 | | | |
| Nickel, dissolved | 20.2 | 0.30 | 0.50 | ug/L | 20.0 | | 101 | 85-115 | | | |
| Selenium, dissolved | 19.0 | 0.30 | 2.0 | ug/L | 20.0 | | 95.2 | 85-115 | | | |
| Silver, dissolved | 19.1 | 0.050 | 0.10 | ug/L | 20.0 | | 95.6 | 85-115 | | | |
| Thallium, dissolved | 19.9 | 0.050 | 0.10 | ug/L | 20.0 | | 99.3 | 85-115 | | | |
| Zinc, dissolved | 97.7 | 4.0 | 5.0 | ug/L | 100 | | 97.7 | 85-115 | | | |
| **Duplicate (AE03361-DUP1)** | | **Source: 20E0806-01** | | | Prepared: 05/12/20 Analyzed: 05/13/20 | | | | | | |
| Antimony, dissolved | ND | 0.20 | 0.50 | ug/L | | ND | | | | 20 | U |
| Arsenic, dissolved | ND | 0.40 | 0.50 | ug/L | | ND | | | | 20 | U |
| Beryllium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Cadmium, dissolved | ND | 0.060 | 0.10 | ug/L | | ND | | | | 20 | U |
| Chromium, dissolved | 0.959 | 0.50 | 0.50 | ug/L | | 0.915 | | | 4.67 | 20 | |
| Copper, dissolved | 7.78 | 0.40 | 0.50 | ug/L | | 7.64 | | | 1.93 | 20 | |
| Lead, dissolved | 0.194 | 0.060 | 0.25 | ug/L | | 0.187 | | | 3.55 | 20 | J |
| Nickel, dissolved | 1.28 | 0.30 | 0.50 | ug/L | | 1.14 | | | 11.4 | 20 | |
| Selenium, dissolved | ND | 0.30 | 2.0 | ug/L | | ND | | | | 20 | U |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03361 - EPA 200.8 (D)** | | | | | | | | | | | |
| **Duplicate (AE03361-DUP1)** | | **Source: 20E0806-01** | | | Prepared: 05/12/20 Analyzed: 05/14/20 | | | | | | |
| Silver, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Thallium, dissolved | ND | 0.050 | 0.10 | ug/L | | ND | | | | 20 | U |
| Zinc, dissolved | ND | 4.0 | 5.0 | ug/L | | ND | | | | 20 | U |
| **Matrix Spike (AE03361-MS1)** | | **Source: 20E0806-01** | | | Prepared: 05/12/20 Analyzed: 05/13/20 | | | | | | |
| Antimony, dissolved | 19.6 | 0.20 | 0.50 | ug/L | 20.0 | ND | 98.1 | 70-130 | | | |
| Arsenic, dissolved | 19.9 | 0.40 | 0.50 | ug/L | 20.0 | ND | 99.7 | 70-130 | | | |
| Beryllium, dissolved | 20.1 | 0.050 | 0.10 | ug/L | 20.0 | ND | 100 | 70-130 | | | |
| Cadmium, dissolved | 19.2 | 0.060 | 0.10 | ug/L | 20.0 | ND | 96.0 | 70-130 | | | |
| Chromium, dissolved | 19.4 | 0.50 | 0.50 | ug/L | 20.0 | 0.915 | 92.5 | 70-130 | | | |
| Copper, dissolved | 26.8 | 0.40 | 0.50 | ug/L | 20.0 | 7.64 | 95.9 | 70-130 | | | |
| Lead, dissolved | 19.2 | 0.060 | 0.25 | ug/L | 20.0 | 0.187 | 94.9 | 70-130 | | | |
| Nickel, dissolved | 20.3 | 0.30 | 0.50 | ug/L | 20.0 | 1.14 | 96.0 | 70-130 | | | |
| Selenium, dissolved | 18.5 | 0.30 | 2.0 | ug/L | 20.0 | ND | 92.6 | 70-130 | | | |
| Silver, dissolved | 18.5 | 0.050 | 0.10 | ug/L | 20.0 | ND | 92.3 | 70-130 | | | |
| Thallium, dissolved | 18.9 | 0.050 | 0.10 | ug/L | 20.0 | ND | 94.5 | 70-130 | | | |
| Zinc, dissolved | 95.0 | 4.0 | 5.0 | ug/L | 100 | ND | 95.0 | 70-130 | | | |
| **Matrix Spike Dup (AE03361-MSD1)** | | **Source: 20E0806-01** | | | Prepared: 05/12/20 Analyzed: 05/13/20 | | | | | | |
| Antimony, dissolved | 19.9 | 0.20 | 0.50 | ug/L | 20.0 | ND | 99.5 | 70-130 | 1.39 | 20 | |
| Arsenic, dissolved | 20.3 | 0.40 | 0.50 | ug/L | 20.0 | ND | 101 | 70-130 | 1.56 | 20 | |
| Beryllium, dissolved | 20.4 | 0.050 | 0.10 | ug/L | 20.0 | ND | 102 | 70-130 | 1.71 | 20 | |
| Cadmium, dissolved | 19.5 | 0.060 | 0.10 | ug/L | 20.0 | ND | 97.6 | 70-130 | 1.62 | 20 | |
| Chromium, dissolved | 19.8 | 0.50 | 0.50 | ug/L | 20.0 | 0.915 | 94.4 | 70-130 | 1.92 | 20 | |
| Copper, dissolved | 27.0 | 0.40 | 0.50 | ug/L | 20.0 | 7.64 | 96.9 | 70-130 | 0.696 | 20 | |
| Lead, dissolved | 19.4 | 0.060 | 0.25 | ug/L | 20.0 | 0.187 | 96.3 | 70-130 | 1.37 | 20 | |
| Nickel, dissolved | 20.1 | 0.30 | 0.50 | ug/L | 20.0 | 1.14 | 94.8 | 70-130 | 1.19 | 20 | |
| Selenium, dissolved | 19.1 | 0.30 | 2.0 | ug/L | 20.0 | ND | 95.7 | 70-130 | 3.22 | 20 | |
| Silver, dissolved | 18.7 | 0.050 | 0.10 | ug/L | 20.0 | ND | 93.7 | 70-130 | 1.49 | 20 | |
| Thallium, dissolved | 19.3 | 0.050 | 0.10 | ug/L | 20.0 | ND | 96.7 | 70-130 | 2.30 | 20 | |
| Zinc, dissolved | 96.1 | 4.0 | 5.0 | ug/L | 100 | ND | 96.1 | 70-130 | 1.14 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE03329 - EPA 1631** | | | | | | | | | | | |
| **Blank (AE03329-BLK1)** | | | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 0.264 | 0.200 | 0.500 | ng/l | | | | | | | J |
| **LCS (AE03329-BS1)** | | | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 5.02 | 0.200 | 0.500 | ng/l | 5.00 | | 100 | 77-123 | | | |
| **Matrix Spike (AE03329-MS1)** | | **Source: 20E0005-01** | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 26.1 | 0.200 | 0.500 | ng/l | 25.0 | 1.36 | 99.1 | 71-125 | | | |
| **Matrix Spike (AE03329-MS2)** | | **Source: 20E0987-01** | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 25.0 | 0.200 | 0.500 | ng/l | 25.0 | 0.391 | 98.4 | 71-125 | | | |
| **Matrix Spike Dup (AE03329-MSD1)** | | **Source: 20E0005-01** | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 26.1 | 0.200 | 0.500 | ng/l | 25.0 | 1.36 | 98.8 | 71-125 | 0.268 | 24 | |
| **Matrix Spike Dup (AE03329-MSD2)** | | **Source: 20E0987-01** | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 25.2 | 0.200 | 0.500 | ng/l | 25.0 | 0.391 | 99.4 | 71-125 | 1.04 | 24 | |
| **Reference (AE03329-SRM1)** | | | | | Prepared: 05/11/20 Analyzed: 05/12/20 | | | | | | |
| Mercury | 46.9 | 0.200 | 0.500 | ng/l | 50.0 | | 93.8 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | |
|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: George Wegmann | |
| 425 Lakeside Drive | Project: SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: Ground Water | 06/01/20 09:08 |

## Metals (Dissolved) by APHA/EPA Methods - Quality Control

| Analyte | Result | MDL | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AE04067 - EPA 1631** | | | | | | | | | | | |
| **Blank (AE04067-BLK1)** | | | | | Prepared: 05/26/20 Analyzed: 05/27/20 | | | | | | |
| Mercury, dissolved | ND | 0.200 | 0.500 | ng/l | | | | | | | U |
| **LCS (AE04067-BS1)** | | | | | Prepared: 05/26/20 Analyzed: 05/27/20 | | | | | | |
| Mercury, dissolved | 4.58 | 0.200 | 0.500 | ng/l | 5.00 | | 91.7 | 77-123 | | | |
| **Matrix Spike (AE04067-MS1)** | | **Source: 20E0497-01** | | | Prepared: 05/26/20 Analyzed: 05/27/20 | | | | | | |
| Mercury, dissolved | 26.1 | 0.200 | 0.500 | ng/l | 25.0 | 0.381 | 103 | 71-125 | | | |
| **Matrix Spike Dup (AE04067-MSD1)** | | **Source: 20E0497-01** | | | Prepared: 05/26/20 Analyzed: 05/27/20 | | | | | | |
| Mercury, dissolved | 25.4 | 0.200 | 0.500 | ng/l | 25.0 | 0.381 | 100 | 71-125 | 2.48 | 24 | |
| **Reference (AE04067-SRM1)** | | | | | Prepared: 05/26/20 Analyzed: 05/27/20 | | | | | | |
| Mercury, dissolved | 44.1 | 0.200 | 0.500 | ng/l | 50.0 | | 88.1 | 68-125 | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

| | | | |
|---|---|---|---|
| Golder Associates - Sunnyvale | Project Manager: | George Wegmann | |
| 425 Lakeside Drive | Project: | SEEP Sampling | Reported: |
| Sunnyvale CA, 94085 | Project Number: | Ground Water | 06/01/20 09:08 |

## Notes and Definitions

| | |
|---|---|
| J | Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ). |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| U | Analyte included in analysis, but not detected at or above MDL. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| dry | Sample results reported on a dry weight basis |
| MDL | Method detection limit |
| Rec | Recovery |
| RPD | Relative Percent Difference |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

*Corporate Laboratory*
208 Mason Street, Ukiah, CA 95482
707-468-0401 F) 707-468-5267
clientservices@alpha-labs.com

*Bay Area Laboratory*
262 Rickenbacker Circle, Livermore, CA 94551
925-828-6226 F) 925-828-6309

*Central Valley Laboratory*
9090 Union Hwy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

# Work Order Chain of Custody Record

Lab No. 20E0497 Page ____ of ____

4

| | |
|---|---|
| **Company/Name:** Golder Associates - Sunnyvale | **Project ID:** SEEP Sampling |
| **Mailing Address:** 425 Lakeside Drive, Sunnyvale, CA 94085 | **Project No:** Ground Water |
| **Contact & Email (MDL PDF & Equis EDD to):** George Wegman, George_Wegmann@golder.com | PO# 063-71099-23 |
| **Phone/Fax:** (408) 220-9233 | **Site Contact:** David Walter |

Signature below authorizes work under terms stated on reverse side.

**Field Sampler - Print Name & Signature:** David Walter, David C Walt

| Sample Identification | Sample Collection Date | Sample Collection Time | Container: 40ml Vial | Container: Poly | Container: Glass | Container: Sleeve | Container: Other | Preservative: HCL | Preservative: HNO3 | Preservative: H2SO4 | Preservative: Other | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Other | 624 GTR Group List | 625 GTR SVOC Group | 625 GTR PNA SIM | 608 CTR Pest & PCBs | 8015 TPH DMO | 8260 TPH Gas | Priority Pollutant 200.8 - Total | Priority Pollutant 200.8 Dissolved | 1631 Total Hg, Hg Diss. | 218.6 Cr6 WW, Cr6 Diss | Cyanide | Equis EDD | J Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GH-Seep-A | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| GH-Seep-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| GH-Seep-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-Seep-A | 5-5-2020 | 1215 | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-Seep-B | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-Seep-C | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| WC-Seep-D | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| Duplicate | | | 6 | 5 | 8 | | | 3 | 2 | | 3 | 11 | x | | | x | x | x | x | x | x | x | x | x | x | x | | |
| Trip Blank - Ground Water | | | 4 | | | | | | | | | x | x | | | x | | | | | | | | | | | | |

**Analysis Request**

**Sample Notes:** Se with a RL of 2ug/l required for this project.

**TAT:** 24 hr ( ) 48 hr ( ) Lab Approval Required ( ) 1 wk ( ) 2 wk (standard) (x) — Lab Approval Required For Rush

| Relinquished by: | Received by: | Date | Time |
|---|---|---|---|
| David C Walt | | 5-5-2020 | 1445 |
| DP | DP | 5.5.20 | 1750 |
| DP | DP | 5.5.20 | 2045 |
| | | | |
| | | | |

samples were field-filtered foir dissolved analytes

PP Metals - As, Cd, Cr, Pb, Se, Ag, Sb, Be, Cu, Zn, Ni, Tl

CA Geotracker EDF Report Yes ( ) No (x)

Sampling Company Log Code: ____

Global ID: EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

**WORK ORDER**



**20E0497**

**Alpha Analytical Laboratories, Inc. Ukiah/Bay Area Lab Chain of Custody**

| | |
|---|---|
| **Client:** Golder Associates - Sunnyvale | **Project Manager:** Robbie C. Phillips |
| **Project:** SEEP Sampling | **Project Number:** Ground Water |

Date Due: 05/20/20 15:00 (10 day TAT)

Received By: David J. Poma — Date Received: 05/05/20 20:45

Logged In By: Sean Foley — Date Logged In: 05/06/20 10:49

Samples Received at: 5.4 deg C

All containers intact: (YES) NO

| Analysis | Department | Expires | # Containers | Comments |
|---|---|---|---|---|
| **20E0497-01 WC-Seep-A [Water] Sampled 05/05/20 12:15 (GMT-08:00) Pacific Ti** | | | | |
| BAL Hg 1631 | BAL Metals | 06/02/20 12:15 | | |
| **20E0497-01 WC-Seep-A [Water] Sampled 05/05/20 12:15 (GMT-08:00) Pacific Ti** | | | | |
| BAL Hg 1631 Dissolved | BAL Metals | 06/02/20 12:15 | | Field Filtered |

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| [signature] | 5-6-20 | | David Poma | 5.6.20 | 1400 |
| David Poma | | | AC | 05/06/20 | 1740 |

**APPENDIX E**

# Inspection Reports

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manjunath Shivalingappa.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 12/11/19 | 0815 | Manju Shiv | P30 Vault & FD - Replace wattles (straw) around the vault. EMSA |
| 12/11/19 | 0840 | Manju Shiv | P30 vault pipeline - No Maintenance needed. Looks good. |
| 12/11/19 | 0900 | Manju Shiv | Medium grade Berm is within the bern. |
| 12/11/19 | 1000 | Manju Shiv | YY - Looks good. |
| 12/11/19 | 1000 | Manju Shiv | CD & WB are working in WMSA. Needs cleanup. Inked Turney |
| 12/11/19 | 1020 | Manju Shiv | Siltenes @ pcra 1&2 are in good condn. |
| 12/11/19 | 1220 | Manju Shiv | YY toc looks good. Work is being done to install liner. |
| 12/11/19 | 1040 | Manju Shiv | Berm established on haul road. Road graded to drain to pit |
| 12/11/19 | 1100 | Manju Shiv | CD & looks good @ Rock plant / Surge pile. |
| | | | |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manjunath Shivalingappa

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 12/19/20 | 1100 | Manju Shiv | Pond 30 EFD - watter & Silt fence fixed. |
| 12/19/20 | 1123 | Manju Shiv | Pond 30 V - Pipeline looks good. |
| 12/19/20 | 1205 | Manju Shiv | Medium grade Stockpile by crusher is within the berm. |
| 12/19/20 | 1230 | Manju Shiv | YY looks good. Vegetated. |
| 12/19/20 | 1400 | Manju Shiv | CDE WB in [redacted] has been redone & is working. |
| 12/19/20 | 1415 | Manju Shiv | Silt fence @ PCPA 1 & 2 looks good. Standing. |
| 12/19/20 | 1430 | Manju Shiv | YY top looks good. liner installed. Installing haybales. |
| 12/19/20 | 1215 | Manju Shiv | Road (Quarry haul road) graded - water will flow to the pit. |
| 12/19/20 | 1445 | Manju Shiv | CD & Sediment basin are doing their job. Looks good. |
| | | | |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manju Shiv

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 12/26/19 | 1030 | Manju Shiv | Pond 3D Vault & FD are working. |
| 12/26/19 | 1045 | Manju Shiv | Pond 3D V pipeline is in good Condition. |
| 12/26/19 | 11:15 | Manju Shiv | Medium grade Stockpile @ Crusher in within berm. |
| 12/26/19 | 1120 | Manju Shiv | Quarry roads graded to drain to the pit. |
| 12/26/19 | 1200 | Manju Shiv | YY vegetated on the top. Looks good. |
| 12/26/19 | 1220 | Manju Shiv | CD & WB on WMSA looks good. Working. |
| 12/26/19 | 1235 | Manju Shiv | Silt fence, wattles, Hay bales in good condn - BCRB 1 & 2 |
| 12/26/19 | 12.50 | Manju Shiv | YY toe - Liner placed. Water being pumped. Good. |
| 12/26/19 | 1330 | Manju Shiv | Rock plant's CD looks good. Cleanup done. |
| | | | |
| | | | |

Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manjunath Shivalingappa.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 12/30/19 | 0800 | ManjuShiv | Pond 30 & FD · looks good. Automated pumping. |
| 12/30/19 | 0820 | ManjuShiv | Pond 30 v pipeline is in good condn. |
| 12/30/19 | 0845 | ManjuShiv | Med. grade Stockpile within berm. Looks good. |
| 12/30/19 | 0855 | ManjuShiv | Roads (Quarry) graded etc drain to the pit. |
| 12/30/19 | 0930 | ManjuShiv | YY - walked area. Looks good. |
| 12/30/19 | 0945 | ManjuShiv | WMSA - CD & WB are working. - Good. |
| 12/30/19 | 0955 | ManjuShiv | PCRA 1 & 2 - with GET impacted. All good condn. |
| 12/30/19 | 1030 | ManjuShiv | Rock plant - CD are working. |
| 12/30/19 | 1045 | ManjuShiv | YY toe - working. Liner is intact. water being pumped. |
| | | | |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manju Shiv.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 01/09/2020 | 0915 | Manju Shiv. | Pond 30-ED and Pipe conveying water to pond 11 are in good condn. |
| 01/09/2020 | 1000 | Manju Shiv | Medium grade Stockpile are within the perm. looks good. |
| 01/09/2020 | 1015 | Manju Shiv | All quarry roads are graded so that it drains to the pit. |
| 01/09/2020 | 1115 | Manju Shiv | YY - Vegetation looks good. walked the area. |
| 01/09/2020 | 1130 | Manju Shiv | CD & WB are working and they in good condition. |
| 01/09/2020 | 1150 | Manju Shiv | PCRA 1&2, Silt fences are in good condition. |
| 01/09/2020 | 1210 | Manju Shiv | YY toe - looks good. Haybales are working water being pumped. |
| 01/09/2020 | 1920 | Manju Shiv | Rock plant - Check dams are working. will clean up later in the month. |
| | | | |
| | | | |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

* CD - Check dams
WB - Waterbars
SB - Sediment Basins
YY - Yeager Yard.

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manju Shiv.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 01/15/2020 | ≈ 10am | Manju Shiv | YY toe - water being pumped for 5 mins. |
| 01/20/2020 | ≈ 9-10am | Manju Shiv | YY toe - water was pumped from SB to 1250 |
| 01/24/2020 | ≈ 10am | Manju Shiv | YY Toe - water was pumped out from SB to 1250 |
| 01/31/2020 | ~8am | Manju Shiv | YY Toe - water was pumped from SB to 1250 for 5-10 mins. |
| 02/05/2020 | ≈ 8am | Manju Shiv | YY toe - water was pumped out from SB to 1250 for 10 mins. |
| 02/11/2020 | ≈ 9am | Manju Shiv | YY toe - water was pumped out from SB to 1250. |
| 02/14/2020 | ≈ 8am | Manju Shiv | YY toe - water was pumped out from SB to 1250 for 5 mins |
| 02/20/2020 | ≈ 9am | Manju Shiv | YY toe - water was pumped out from SB to 1250 |
| 02/24/2020 | ≈ 11am | Manju Shiv | YY toe - water was pumped out from SB to 1250. |
| 03/01/2020 | ≈ 10am | Manju Shiv | YY toe - water was pumped out for YY SB to 1250. |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

SB - Sediment Basin.

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manju Shiv.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 03/16/2020 | 0800 | Manju Shiv | Pond 30 V & FD - Working; Conveyance pipe to P11 - in good condition |
| 03/16/2020 | 0845 | Manju Shiv | Berm @ medium grade SP. - Looks good. Water flowing to pit. |
| 03/16/2020 | 0900 | Manju Shiv | Quarry Roads - All roads past Crusher are graded to drain to Pit. |
| 03/16/2020 | 0925 | Manju Shiv | PCRA 1 & 2 - Silt fences are in good Condition. |
| 03/16/2020 | 0940 | Manju Shiv | WMSA - CD's & WB's are in good condn. Working. |
| 03/16/2020 | 1000 | Manju Shiv | YY top - Silt fences are fixed. Vegetation is good. |
| 03/16/2020 | 1015 | Manju Shiv | YY Bottom - NO discharge to Creek. Water pumped from SB to P2 |
| 03/16/2020 | 1038 | Manju Shiv | Surge pile - Rock plant roads are fine. CD & WB are in good condn |
| ~~03/16/2020~~ | | ~~Manju Shiv~~ | |
| ~~03/16/2020~~ | | ~~Manju Shiv~~ | |
| | | | |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

V – Vault
FD – French Drain
CD – Check dams
WB – Water bars
SB – Sediment Basin.
SP – Stock pile.

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** Manju Shiv.

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 03/20/2020 | 0830 | ManjuShiv | Pond 30 V & FD - works. Not enough water to pump to Pond 11 |
| 03/20/2020 | 0850 | ManjuShiv | Berm @ Medium grade Stockpile is graded for water to flow to Pit. Rocks within berm. |
| 03/20/2020 | 0855 | ManjuShiv | Quarry Bench Roads are graded to drain to pit. |
| 03/20/2020 | 0930 | PCRA 1&2 ManjuShiv | Silt fences are in good condn. A small section along the road heads to be tied. Not urgent. |
| 03/20/2020 | 0945 | ~~ManjuShiv~~ | CD & WB in WMSA are in good condn. working |
| 03/20/2020 | 1030 | ManjuShiv | GR Confirmed all Silt fence were fixed & the ones which were not functional were removed. SF in good condn. YY top. |
| 03/20/2020 | 1045 | ManjuShiv | YY bottom. No water discharge from the slope to Creek. SB in good condn |
| 03/20/2020 | 1145 | ManjuShiv | Surge pile - Rock plants roads, CD are in good condition. |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |

**Routine Weekly Inspection Log: Containment Structure**

**Inspector** GEORGE TAYLOR

**Note overall condition of area, operations, including pipelines, sumps, pumps. Identify specific elements needing attention. Note what actions were taken. Three daily inspections needed per week when containment structure is operational.**

| Date | Time | Inspector | Containment System Comments (include maintenance and corrective actions) |
|---|---|---|---|
| 3/16/20 | 1:00 PM | G.T | NO WATER FLOW. NO ROCK/SLOPE MOVEMENT. |
| 3/17/20 | 11:30 AM | G.T. | " " |
| 3/18/20 | 12:30 PM | G.T. | NO WATER FLOW. NO ROCK OR SLOPE MOVEMENT. |
| 3/23/20 | NOON | G.T. | SAME AS ABOVE. |
| 3/25/20 | 9:30 AM | G.T. | " " |
| 3/30/20 | 8:30 AM | G.T. | " " |
| 4/6/20 | 7:00 AM | G.T. | NO FLOW OR ROCK MOVEMENTS. POND WAS PUMPED. |
| 4/9/20 | 9:00 AM | G.T. | " " |
| 4/14/20 | 7:00 AM | G.T. | " " |
| 4/22/20 | 10:00 AM | G.T. | " " |
| 4/27/20 | 1:30 PM | G.T | " " |
| Inspection also required following event-driven incident within 24 hours of being able to safely access the area. | | | |
| 5/5/20 | 9:00 AM | G.T. | " " |
| 5/13/20 | 8:30 AM | | SLOPE FACE WET. WATER FLOWING FROM EAST SEEP BUT NOT ACCUMULATING OR FLOWING TO BASIN. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 5/13/20 8:30AM | SAME |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: YES | Rain event start date/time and total precipitation: TRACE, MIST, SPRINKLES Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: G. TAYLOR | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 5/13/20 |

**Slope Inspection Log**

**Inspector** G. TAYLOR **Date** 5/13/20

**Time** 8:30 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | SLOPE FACE IS WET FROM RAIN, NO FLOW |
| | | | |
| Repaired cracks: Upper Bench | | | NOTICED 1 SMALL CRACK. WILL CONTINUE TO WATCH |
| | | | |
| Repaired cracks: Lower Bench | | | GOOD |
| | | | |
| Haul road & berm crossing Yeager Yard | | | GOOD |
| | | | |
| CAT TRAILS | | | WATER AT CAT TAIL AREA (STANDING) |
| | | | |







# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 5/18/20 | SAME |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: No | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: G. Taylor | Inspector Title: Quarry Mgr |
|---|---|
| Signature: | Date: 5/18/20 |

**Slope Inspection Log**

**Inspector** G. Taylor **Date** 5/18/20

**Time** 8:30 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | OKAY | | SAME AS LAST WEEK EXCEPT FACE IS DRYER |
| | | | |
| Repaired cracks: Upper Bench | | | SAME AS LAST WEEK. SAME CRACK |
| | | | |
| Repaired cracks: Lower Bench | | | GOOD. |
| | | | |
| Haul road & berm crossing Yeager Yard | | | GOOD. |
| | | | |
| CAT TAILS | | | STILL WET. |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 5/25/20 8:00AM | 5/25/20 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NONE | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: GEORGE TAYLOR | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 5/25/20 |

**Slope Inspection Log**

**Inspector** G. Taylor

**Date** 5/25/20

**Time** 9:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | SAME AS LAST WEEK |
| | | | |
| Repaired cracks: Upper Bench | | | Geo No MOVEMENT |
| | | | |
| Repaired cracks: Lower Bench | | | " " |
| | | | |
| Haul road & berm crossing Yeager Yard | | | NO CRACKS |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 6/1/20 9:00 AM | 6/1/20 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NONE | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: GEORGE TAYLOR | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 6/1/20 |

**Slope Inspection Log**

**Inspector** G. TAYLOR

**Date** 6/1/20

**Time** 9:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | ALL THE SAME |
| | | | |
| Repaired cracks: Upper Bench | | | SAME |
| | | | |
| Repaired cracks: Lower Bench | | | SAME |
| | | | |
| Haul road & berm crossing Yeager Yard | | | No CRACKS |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| JUNE 5TH 8:00AM | JUNE 8TH 2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NONE | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: GEORGE TAYLOR | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 6/8/20 |

**Slope Inspection Log**

**Inspector** G. Taylor **Date** 6/9/20

**Time** 8:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | OKAY | | FACE STILL A LITTLE WET |
| | | | |
| Repaired cracks: Upper Bench | GOOD | | |
| | | | |
| Repaired cracks: Lower Bench | GOOD | | SAME SMALL CRACK, NO MOVEMENT |
| | | | |
| Haul road & berm crossing Yeager Yard | NO CRACKS | | |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| JUNE 15, 2020 7:30 AM | JUNE 15TH, 2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NONE | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: GEORGE TAYLOR | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 6/15/20 |

**Slope Inspection Log**

**Inspector** GEORGE TAYLOR **Date** 6/15/20

**Time** 8:15 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | OKAY | | FACE DRY |
| | | | |
| Repaired cracks: Upper Bench | NONE | | NO NEW CRACKS. SOME @ CRACK NO MOVEMENT |
| | | | |
| Repaired cracks: Lower Bench | NONE | | |
| | | | |
| Haul road & berm crossing Yeager Yard | NONE | | |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 6/22/20 8:00AM | 6/22/20 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: No | Rain event start date/time and total precipitation: Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: George Taylor | Inspector Title: Q. MGR |
|---|---|
| Signature: | Date: 6/22/20 |

**Slope Inspection Log**

**Inspector** GEORGE TAYLOR **Date** 6/22/20

**Time** 8:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | NO WATER AT FACE |
| | | | |
| Repaired cracks: Upper Bench | | | OKAY |
| | | | |
| Repaired cracks: Lower Bench | | | OKAY |
| | | | |
| Haul road & berm crossing Yeager Yard | | | OKAY |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 6/29/2020 9:00Am | 6/29/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: clear. no precipitation | Hours since Last Rain Event: |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: Manju Shiv | Inspector Title: Env. Prof IV |
|---|---|
| Signature: S. Shiv | Date: 06/29/2020 |

**Slope Inspection Log**

**Inspector** Manju Shiv

**Date** 06/29/2020
**Time** 09:00 Am

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | NO water at face. |
| | | | |
| Repaired cracks: Upper Bench | | | OK. |
| | | | |
| | | | |
| Repaired Cracks: Lower Bench | | | OK. |
| | | | |
| Haul Roads, berm Crossing, Yeager Tarc | | | OK. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 07/06/2020 : 09:50 Am | 07/06/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. Prof IV |
| Signature: S. Shiv | Date: 07/06/2020. |

**Slope Inspection Log**

**Inspector** Manjit Singh

**Date** 07/06/2020.
**Time** 09:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | | | No water at face. |
| | | | |
| Repaired Cracks: | | | OK |
| Upper Bench. | | | |
| | | | |
| Repaired Cracks: | | | OK |
| Lower Bench. | | | |
| | | | |
| Haul Road & | | | OK |
| Berm Crossing | | | |
| Yeager Yard | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 07/13/2020. 09:00 AM | 07/13/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. NO precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. Prof IV |
| Signature: S. Shiv | Date: 07/06/2020 |

**Slope Inspection Log**

**Inspector** Manju Shiv

**Date** 07/13/2020

**Time** 09:00 am.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Y Y Sediment Basin | | | → No water at face. |
| Repaired Cracks Upper Bench | | | } OK |
| Repaired Cracks Lower Bench | | | } OK. |
| Haul Road & Berm Crossing. Yeager Yard | | | } OK |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 07/20/2020 09:00 Am | 07/20/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clr. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. prof. IV |
| Signature: | Date: 07/20/2020. |

## Slope Inspection Log

**Inspector** Manju Shiv

**Date** 02/20/2020
**Time** 09:00 AM.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sediment Basin | | | → NO water at face. SB looks good. |
| Repaired cracks — Upper Bench | | | } O/C |
| Lower Bench | | | } O/C. |
| Haul Road & Berm Crossing @ YY | | | } O/C |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 07/27/2020 0900 | 07/27/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjunath Shivalingappa | Env. Prof. IV |
| Signature: S. Lingappa | Date: 07/27/2020. |

**Slope Inspection Log**

**Inspector** Manjunath Srivalingappa. **Date** 07/27/2020
**Time** 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Y Y Sediment Basin | | | → No water at face |
| Upper Bench | | | → OK |
| Repaired cracks → Lower Bench | | | → OK |
| | | | |
| | | | |
| Haul Road | | | OK |
| & Berm Crossg | | | |
| @ 77 | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 08/03/2020 09AM | 08/03/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. NO precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjunath Shivalingappa | Env. Prof. IV |
| Signature: S. Manj. | Date: 08/03/2020 |

## Slope Inspection Log

**Inspector** Manju SWV

**Date** 08/03/2020

**Time** 0900 hrs.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sediment Basin | | | → DIC No water @ face. |
| Upper Bench | | | → DIC |
| Repaired Cracks → Lower Bench | | | → OK |
| Haul Road & Berm Crossing @ YY | | | OK |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 08/10/2020 09:00 AM | 08/10/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. prof. IV |
| Signature: S. Manjula | Date: 08/10/2020 |

**Slope Inspection Log**

**Inspector** Manju Shiv

**Date** 08/10/2020
**Time** 09:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sediment Basin | | | → No water @ face. |
| Upper Bench | | | → OK |
| Repaired cracks → Lower Bench. | | | → OK |
| Haul Road & Berm Crossing @ YY | | | → OK. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 08/17/2020 08:00AM | 08/17/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Sur | Env. profession IV |
| Signature: | Date: 08/17/2020 |

**Slope Inspection Log**

**Inspector** Manju Shr. **Date** 08/17/2020

**Time** 08:00 Am

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| 44 Sediment Basin | | → | NO water @ face |
| Upper Bench | | → | ~~loaded~~ ~~wet~~. Covered cracks has not changed - Good. |
| Repaired cracks → Lower Bench | | → | looks good as well. |
| Haul Road & Berm Crossing @ 44 | | → | NO cracks. |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 08/24/2020 09:00AM | 08/24/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Suv | Env. Professional IV |
| Signature: S. Manju | Date: 08/24/2020. |

## Slope Inspection Log

Inspector Manju Shiv

Date 08/24/2020
Time 09:00 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| 44 Sediment Basin. | Basin | pumps & liner | No water at face. No water in Sediment Basin. |
| Upper Bench | | → | NO cracks → OK |
| Lower Bench | | → | NO cracks → OK |
| Haul Road & Berm Crossing @ 44 | | | NO cracks → OK. |

Recent cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 08/31/2020 @ 10AM | 08/31/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Sivaraman | Environmental Professional IV |
| Signature: | Date: 08/31/2020. |

## Slope Inspection Log

Inspector Manju Shiv.

Date 08/31/2020.
Time 10:00

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| 44 Sediment Basin | SB | Pump & Liner | No Water @ face. No water in Sediment Basin. |
| | | | |
| Upper Bench (Repaired Cracks) | → | → | No cracks. Looks OK |
| Lower Bench (Repaired Cracks) | → | → | No cracks. Looks OK. |
| | | | |
| Haul Road & Berm Crossing @ 44 | | | No cracks → OK. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 9/7/2020 @ 9am | 9/7/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Environmental Proximal IV |
| Signature: S. Shiv | Date: 9/7/2020 |

## Slope Inspection Log

**Inspector** Manju Shiv **Date** 9/7/2020
**Time** 9:00

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sed Basin | SB | Pump & Line | NO water @ face. NO water in Sediment Basin. |
| Upper Bench | → | | NO cracks. OK |
| Lower Bench | → | | NO cracks. OK |
| Haul Rd. & Berm Crossing @ YY | | | NO cracks. OK. |
| | | | |
| | | | |

Repaired Cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 09/14/2020 @ 8am | 09/14/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. Prof. IV |
| Signature: S. Shiv | Date: 9/14/2020 |

## Slope Inspection Log

**Inspector** Nanji Shiv

**Date** 9/14/2020

**Time** 8am

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sedimt Basin. | SB | Pump/Line | SB work is in progress. No water. |
| Upper Bench | → | → | No cracks. OK |
| Lower Bench | → | → | No cracks. OK |
| Haul Road & Berm | | | No cracks. OK. |
| Xing @ 44 | | | |

Repaired Cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 09/17/2020 9:15 | 09/17/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear, No Precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv. | Environmental Professional IV |
| Signature: | Date: 09/17/2020. |

**Slope Inspection Log**

**Inspector** Manju Shiv.

**Date** 09/7/2022
**Time** 9:15 AM

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sediment Basin | SD | Pumps. | No rain. No water @ face. |
| Upper Bench (Repaired Cracks) | → | → | OK. No new cracks. |
| Lower Bench (Repaired Cracks) | → | → | OK. No new cracks |
| Haul road & Berm crossing @ YY | | | No cracks → OK. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 9/21/2010 @ 10am | 9/21/2010. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Sriv | Env. Prof IV |
| Signature: S. Eyles | Date: 9/21/2010 |

**Slope Inspection Log**

**Inspector** Manju Sur. **Date** 9/21/2020
**Time** 10am.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| 44 Std Bench | | | BB work in progress. No cracks. |
| Upper Bench | → | → | NO cracks. OC |
| Lower Bench | → | → | NO cracks OC |
| Haul rd. & Berm xing @ 44 | | | No cracks - OIC. |

Repaired cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 9/28/2020 @ 0900 | 9/28/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjiv Sahi | Env. Prg. IV |
| Signature: | Date: 9/28/2020 |

**Slope Inspection Log**

**Inspector** Manju Shiv **Date** 9/28/2020
**Time** 9:00

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sed Basin | | | Sediment Basin work in progress. 50% complete. NO water / rain |
| Upper Bench | → | → | NO cracks. OK ✓ |
| Lower Bench | → | → | NO cracks. OK ✓ |
| Haul Rd & Berm x'ing @ YY | | | NO cracks. OK ✓ |

Repaired cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 10/5/2020 @930 | 10/5/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Sinu | Env. Prof IV |
| Signature: S. Lynch | Date: 10/5/2020 |

**Slope Inspection Log**

**Inspector** Manju Sen **Date** 10/5/2020
**Time** 9:30

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sed Basin | | | SB work in progress. NO water. |
| Upper Bench | → | | No cracks. OK ✓ |
| Lower Bench | → | | No cracks. OK ✓ |
| | | | |
| Haul Rd & Boom x'ing @ YY | → | | No cracks. OK ✓ |
| | | | |
| | | | |

Repaired cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 10/12/2020 @ 0900 | 10/12/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. NO Precipitation | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjit Shiv | Env. Proj. IV. |
| Signature: S. Manjit | Date: 10/12/2020 |

**Slope Inspection Log**

**Inspector** Alexis Silva

**Date** 10/12/2020
**Time** 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| YY Sed Berm | | | SB work in progress. 95% Complete. No water. |
| Upper Bench | → | | NO cracks. OK } will be Hydroseeded on Oct 15th |
| Lower Bench | → | | NO cracks. OK } |
| | | | |
| | | | |
| Haul Rd & Berm x'ing @ YY | → | | NO cracks. OK. |
| | | | |
| | | | |

Repaired Cracks

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 10/19/2020 @ 0900 | 10/19/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted):**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjunatha Shivalingappa | Environmental Professional IV |
| Signature: S. Manjunatha | Date: 10/19/2020. |

**Slope Inspection Log**

Inspector Manjunatha Shivalingappa

Date 10/19/2020

Time 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Yeager yard Sediment Basin | | | Looks really good. Construction completed on October 15th. / No rain. No water @ face. No water in the sediment basin. |
| Upper Bench | → | | No cracks. Hydroseeded. ✓ |
| Repaired cracks / Lower Bench | → | | No cracks. Hydroseeded. ✓ |
| | | | |
| Haul Rd & Berm x'ing @ yy | → | | No cracks. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 10/27/2020 @ 0900 | 10/27/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manju Shiv | Env. Prof. IV |
| Signature: S. Leigh | Date: 10/27/2020. |

**Slope Inspection Log**

Inspector Nanju Shiv

Date 10/27/2020

Time 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| W. Sed Basin | → | → | No water @ face. No rain. |
| Upper Bench | → | → | No cracks. Hydroseeding. |
| Lower Bench | → | → | No Cracks. Hydroseeded. |
| Haul Rds & Berms/ing @ YY | | | No walls. OK ✓ |

Required walks.

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 11/2/2020 @ 9:00 | 11/2/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: | Hours since Last Rain Event: |
|---|---|
| Clear. No precipitation. | |

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: | Inspector Title: |
|---|---|
| Manjunath Shivalingappa | Env. Prof IV |
| Signature: | Date: 11/2/2020. |

**Slope Inspection Log**

Inspector Maya Shiv

Date 11/2/2020
Time 9:00am

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| W Sd Bank | → | → | No water @ face. No rain. |
| Upper Bench (Repaired cracks) | → | → | No cracks. Hydroseeded. |
| Lower Bench (Repaired cracks) | → | → | No cracks. Hydroseeded. |
| Haul Road @ Farm X'ing @ 44 | | | No cracks. OK. |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 11/9/2020. @ 0900 | 11/9/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NO. | Rain event start date/time and total precipitation: 11/7/2020 @ 0100 0.14" Hours since Last Rain Event: 72 hrs |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: Manjunath Shivalingappa | Inspector Title: Sr. Professional IV |
|---|---|
| Signature: | Date: 11/9/2020. |

**Slope Inspection Log**

**Inspector** Manjunath. Shivalingappa **Date** 11/9/2020

**Time** 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | → | → | No water @ face. Some water in Sediment basin from direct precipitation on the liner. |
| Repaired cracks: Upper Bench | → | → | No cracks, hydroseeded. |
| Repaired cracks: Lower Bench | → | → | No cracks, hydroseeded. |
| Haul road & berm crossing Yeager Yard | → | → | No cracks. Looks good. |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 11/16/2020 10 AM | 11/17/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Clear. Precipitation in last 24 hrs: NO | Rain event start date/time and total precipitation: 11/13/2020 @ 1700 0.13" of rain Hours since Last Rain Event: > 24 hrs |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: Manjunath Shivalingappa | Inspector Title: Environmental Professional IV |
|---|---|
| Signature: S. Lg'l | Date: 11/17/2020. |

**Slope Inspection Log**

**Inspector** Manju Shiv. **Date** 11/6/2020

**Time** 10 am.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | Pump. → | | Pump will be placed on 11/6/2020. NO water @ face. Some water inside Sediment Basin from direct precipitation. |
| | | | |
| Repaired cracks: Upper Bench | → | | NO cracks. OK ✓ Hydroseed is Sticking. No washouts |
| | | | |
| Repaired cracks: Lower Bench | → | | NO cracks → u → |
| | | | |
| Haul road & berm crossing Yeager Yard | → | | NO cracks. OK ✓ |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 11/23/2020 @ 0900 | 11/23/2020 |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | No | Photo Reference IDs: |
|---|---|---|---|
| | | (No) | |

**Weather**

| Weather: Precipitation in last 24 hrs: NO Rain | Rain event start date/time and total precipitation: Hours since Last Rain Event: >~~48~~ Hrs |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: Manjunath Shivalingappa | Inspector Title: Environmental Professional IV |
|---|---|
| Signature: S. Manjunath | Date: 11/23/2020 |

## Slope Inspection Log

**Inspector** Manju Shiv

**Date** 11/23/2020

**Time** 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | → | → | Pump placed. Containment has 3" of water. Not enough to pump. |
| Repaired cracks: Upper Bench | → | → | looks good. No Cracks |
| Repaired cracks: Lower Bench | → | → | looks good. No cracks. |
| Haul road & berm crossing Yeager Yard | → | → | looks good. No cracks. |
| | | | |
| | | | |
| | | | |

# SLOPE INSPECTION REPORT

| Date and Time of Inspection: | Date Report Written: |
|---|---|
| 11/30/2020 @ 1000 | 11/30/2020. |

**General Information**

**Site Information**

Facility Name: Lehigh Southwest Cement Company, Permanente Plant and Quarry

Facility Address: 24001 Stevens Creek Blvd, Cupertino CA 65104

| Photos Taken: (Circle one) | Yes | (No) | Photo Reference IDs: |
|---|---|---|---|

**Weather**

| Weather: Precipitation in last 24 hrs: NO rain | Rain event start date/time and total precipitation: Hours since Last Rain Event: >24 hrs. |
|---|---|

**Exception Documentation (explanation required if inspection could not be conducted).**

**Inspector Information**

| Inspector Name: Manjunath Shivalingappa | Inspector Title: Environmental Scientist III |
|---|---|
| Signature: | Date: 11/30/2020. |

**Slope Inspection Log**

**Inspector** Manjunatha Shivalingappa **Date** 11/30/2020.
**Time** 1000.

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken.**

**Note new open ground-cracks, evidence for erosion and boulder or rock falls, observations of seeps and surface flow. Document with photos. Use additional sheets, if necessary.**

**DO NOT ENTER SEDIMENT BASIN OR BASE OF SLOPE AREA DURING/AFTER RAIN EVENTS. MAKE OBSERVATIONS FROM FAR AWAY.**

| Area Inspected | Drainage Structures | Operations Systems | Comments |
|---|---|---|---|
| Sediment Basin | Sed Basin | Pumps → | Pump Placed - ready to go. Not enough rain water to pump. SB looks good |
| | | | |
| Repaired cracks: Upper Bench | → | → | No cracks. OK ✓ |
| | | | |
| Repaired cracks: Lower Bench | → | → | No cracks. OK ✓ |
| | | | |
| Haul road & berm crossing Yeager Yard | → | → | No cracks - OK ✓ |
| | | | |
| | | | |
| | | | |

**Monthly Inspection Log**

Inspector Manju Suv

Date 10/30/2020

Time 09 00

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EM SA | P30 & FD | P30 to P11 | Pond is dry. No rain. Pumps off |
| ~~EM SA~~ | P30 V pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by Crusher | Medium grade pile within the berm. |
| Quarry | Pit | Stockpiles | All roads are graded to drain to the pit. |
| WMSA | YY | Hydromulch. | Some parts were hydromulched (filled cracks) on Oct 15th. good. |
| WMSA | CD & SB | Stockpile | CD & WB are in good condition. |
| WMSA | Silt fence | Rock 1 & 2 | Silt fence looks good. No repairs needed. |
| Quarry/WMSA | Ystore | SB | New Sediment Basin project was completed on Oct 15. Good. |
| Stockpile | CD & SB | CD & SB | CD & SB are well maintained and in good condition. |
| | | | |
| | | | |

→ CD – Check dams, WB – waterbar. YY – yeager yard, SB – Sediment Basin.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manju Shiv.

Date 09/25/2020

Time 0730

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 & PD | P30 to PM | Pond is dry. Pumps work - good Condn. |
| EMSA | P30 Vpiping | P30 to PM | Pipeline in good condition. |
| Quarry. | Berm | Stockpiles by Crusher | Medium graded within the berm. |
| Quarry. | Pit | Stockpiles | All quarry roads are graded to drain to the pit. |
| WMSA | YY | Hydroseeding | Hydroseeding looks good. |
| WMSA | CD/WB | Stockpile | CD & WB are maintained & in good Condition. |
| WMSA | Siltfence | PCRA 1 & 2 | Siltfence in good Condition. |
| Quarry/WMSA | YY toe | SB | [redacted]. No water. Working on Sediment Basin. will be completed by Oct 15th 2020. |
| Stockpile | CD & SB | CD & SB | CD & SB are maintained & in good Condition. |

CD – Checkdam; SB – Sediment Basin; WB – water bars; YY – Yeager yard.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

## Monthly Inspection Log

Inspector Manju Shiv

Date 08/28/2020

Time 0745

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 & FD | P30 to P11 | Pumps work. Pond dry. Pumps are off. |
| EMSA | P30 V pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | STOCKPILE BY CRUSHER | Medium grade ~~pipeline~~ Stockpile is within the berm. |
| Quarry | Pit | Stockpiles | All quarry roads are ~~bottom~~ graded to drain to pit. |
| WMSA/ Quarry | YY | Hydroseeding | Hydroseeding is doing good. |
| WMSA | CD/WB | Stockpile | CD & WB are maintained and in good condition. |
| WMSA | Silt fence | PCRA 1 & 2 | Silt fence is in good condition. |
| Quarry/WMSA | YY toe | SB | Sediment Basin in good condition. No water. |
| Stockpile | CD & SB | CD & SB | CD & SB are maintained and in good condition. |
| | | | |
| | | | |

CD - check dams; WB - water bars; SB - Sediment Basin; YY - Yeager Yard.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manju Shiv

Date 07/31/2020

Time 0800

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 & FD | P30 to P11 | Pumps work. Pond almost empty. NO pumping. |
| EMSA | P30 & pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry. | Berm | Stockpile by crusher | Medium grade Stockpile is within the berm |
| Quarry | pit | Stockpiles | All quarry roads are graded to drain to the pit. |
| WMSA0 | YY | Hydroseeding | Hydroseeded areas are doing well. |
| WMSA | CD/WB | Stockpile | WB & CD are in place and in good condition. |
| WMSA | Silt fence | PCBA 1&2 | Silt fence in good condition. |
| Quarry/WMSA | Y toe | SB | Sediment basin in good condition. NO water. |
| Stockpile | CD & SB | CD & SB | CD & SB are maintained. |
| | | | |
| | | | |

* CD – check dams ; SB – Sediment Basin ; WB – Water Bars ; YY – Yeager Yard.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manju Shiv

Date 06/26/2020

Time 0830

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30V & FD | P30 to P11 | Pumps work. Ponds dry, Pump not operational. |
| EMSA | P30V Pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by crusher | Medium grade Stockpile is within the Berm. |
| Quarry | Pit | Stockpiles | All quarry roads are graded to drain to the quarry pit. |
| WMSA | YY | Hydroseeding | Hydroseeded areas have picked up well. |
| WMSA | CD / WB | Stockpile | CD & WB are in place and in good condition. |
| WMSA | Silt fence | BMP 1 & 2 | Silt fence is in good condition. |
| Quarry WMSA | YY toe | SB | Sediment Basin is in good condn. No discharge |
| Surge pile | CD & SB | CD & SB | CD & SB are maintained well. |
| | | | |
| | | | |

* CD - Checkdam, * SB - Sediment Basin * YY - prayer yard.
* WB - water Barsr.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manju Shiv

Date 05/21/2020

Time 1330

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30V & FD | P30 to P11 | Pumps work. Not operational due to low water level. |
| EMSA | P30V pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by crusher. | Medium grade Stockpile is contained in the berm |
| Quarry | Pit | Stockpile | Roads are graded so that water drains to the pit. |
| WMSA | CD/WB | Stockpile | CD & WB are in good condn. NO maintenance needed. |
| WMSA | Silt fence | RCRA 1 & 2 | Silt fence is in good condition. NO maintenance needed. |
| WMSA | [redacted] YY | Hydroseeding | California poppies are growing. Hydroseeding looks good. |
| Quarry/WMSA | CD & SB | [redacted] SB | SB is almost empty. No discharge to the Creek. |
| Surge pile | CD & SB | CD & SB | CD & SB maintained and in great condition. |
| | | | |
| | | | |

* CD - Check dams * SB - Sediment Basin * WB - Water Bars * YY - Yeager Yard.
FD - French drain. * V - Vault @ Pond 30.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 04/07/2020

Time 0830

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 & FD | P30 to P11 | Pumps @ vault & FD Works and in good Condn. |
| EMSA | P30 V pipeline | P30 to P11 | Pipeline from P30 V to DM is in good Condition. |
| Quarry | Berm | Stockpile by engineer | Stockpile (Medium grade) is placed within the berm. |
| WMSA | YY | Hydroseeding | Hydroseeding is working. Some cracks on the YY was fixed. |
| WMSA | CD/WB | Stockpile | CD & WB are in good Condition. NO maint. necessary at this time |
| WMSA | Silt fence | PCRA 1 & 2 | Silt fences were fixed last week. good condition now. |
| Quarry | Pit | Stockpile | Roads are graded to drain to the pit. |
| Surge pile | CD & SB | CD & SB | CD & SB are maintained and is in good condn. |
| Quarry/WMSA | YY toe | SB | water was puped out today. NO discharge to the Creek. |
| | | | |
| | | | |

* CD check dams ; * WB - water bars ; * SB - Sediment Basin. * FD - french drain ; V → vault

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

**Inspector** Manju Shiv **Date** 03/03/2020

**Time** 09Am

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| ETM SA | P30 V & FD | P30 to P11 | Pumps @ vault & FD are operational. Not in use – No water level low. |
| ETM SA | P30 V Pipeline | P30 to P11 | Pipeline is in good condition. |
| Quarry | Berm | Stockpile by Hopper | Stockpile is within the berm. |
| WM SA | YY | Hydroseeding | Hydroseeded area has taken off. No issues. |
| WM SA | CD/WB | Stockpile | CD & WB are in good condition. |
| WM SA | Silt fence | PCRA/Q2 | Silt fence in in good condition. Small section of Silt fence needs fix – |
| Quarry | Pit | Stockpile | All the water will drain to pit. roads are graded |
| Quarry/WM SA | YY Bottom | SB | Water is collected in the SB. No discharge to Greek. Water pumped to 1250 |
| Surge pile | CD & SB | CD & SB | CD's were cleaned out. CD & SB looks good. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manju Shiv

Date 02/14/2020

Time 0810

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 V & FD | P30 to P11 | Looks good. No rain past week. No pumping. |
| EMSA | P30 V Pipeline | P30 to P11 | " Same as above |
| Quarry | Berm | Stockpile by hopper | Working within the berm. |
| WMSA | YY | Hydroseeding | Looks good. No new changes. Hydroseeding/grass has grown |
| WMSA | CD/WB | Stockpile | Looks good. No rain. |
| WMSA | Silt fence | PCRA 1 & 2 | Looks Good. GEI Confirmed it. |
| Quarry | Pit | Stockpile | Looks good. No rain. |
| Quarry/WMSA | YY bottom | SB | Looks good. Pumping water to pit. |
| Surge pile | CD & SB | CD & SB | Looks good. CD scheduled to be cleaned. |
| | | | |
| | | | |

* YY-Yeager Yard, CD-Checkdam, WB-Water bars, SB-Sediment Basin.

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

## Monthly Inspection Log

Inspector Manju Shiv

Date 01/27/2020

Time 0745

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & french drain | P30 to P11 | Both pumps are working and in good condition |
| EMSA | P30 vault pipeline | P30 to P11 | pipeline is in good condition. |
| Quarry | Berm | Stockpile by hopper | Medium grade Stockpile is within the berm. |
| WMSA | YY | Hydroseeding | Hydroseeded are looks good. |
| WMSA | CD/WB | Stockpile | CD & WB are working and in good condition. |
| WMSA | Silt fence | RCRA 1 & 2 | Silt fence are in good condition. No work needed. |
| Quarry | Pit | Stockpiles | All quarry roads are graded to drain to the pit. |
| Quarry/WMSA | YY bottom | SB | Silt free and sediment basin is in good condn. Water pumping. |
| Surge pile | CD & SB | CD & SB | CD's will be cleaned next week. SB looks good. |
| | | | |
| | | | |

* YY - Yeager ford, CD - Checkdams, WB - Water bars, SB - Sediment Basin

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 01/17/2020

Time 0800

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | Pond 30 vault & ED | P30 to P11 | pumps operational. Area looks good. |
| EMSA | P30 Vault pipeline | P30 to P11 | Pipeline is in good condn. |
| Quarry | Berm | Medium sized pile by hopper | looks good - water is not going over the berm. |
| WMSA | YY | Hydroseeded | vegetation is picking up again - looks good. |
| WMSA | CD/WB | Stockpile area | Water bars & check dams are in working condition. |
| WMSA | Silt fence | PCRA 1 & 2 | Silt fence looks good. |
| Quarry/Pumps | YY Bottom be | SB | Rocks have come down - contained within the SB - good. |
| Quarry | Berm/pit | Stockpile | water draining to the pit - good. |
| Surge pile | CD & SB | CD & SB | |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

CD - Check dam
SB - Sediment basin
YY - Yeager yard
WB - Water bar
ED - trench drain

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 12/5/19

Time 0835

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & FD | P30 to P11 | Pump working. (Tossed vault); Turned on FD pump. |
| EMSA | P30 vault Pipeline | P30 to P11 | Pipeline is in good condition. |
| Quarry | Berm | Medium grade Stockpiles by crusher | Stockpiles are away from the berm. looks good. |
| WMSA | YY | Hydroseeding | Vegitated Slopes. looks good. |
| WMSA | CD/WB | Stockpile | CD & WB are working. |
| WMSA | Silt fence | PCRA 1 & 2 | Silt fences are holding imp. looks good. |
| Quarry/WMSA | YY Bottom toe | SB | Silt fences are holding up. Good. |
| Quarry | Berm/pit | Stockpile | Roads graded to drain water to the pit. |
| Surge pile | CD & SB | CD & SB | Road needed cleanup. Cleaned same day. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* FD - french drain.
* YY - Yeager Yard.
* CD - check dam
* WB - waterbars
* SB - Sediment Basin.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 11/26/19

Time 0810

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & FD | P30 to P11 | Pumps working. (Jogged Pumps). |
| EMSA | P30 vault Pipeline | P30 to P11 | Pipeline is in good condition. |
| Quarry | Berm | Medium grade stockpile by Crusher | Stockpile is away from the berm. |
| WMSA | YY | Hydroseeding | Hydroseeding has taken up. looks good. minor Silt fence fix required |
| WMSA | CD/WB | Stockpiles | Works good. Final ditches in in place. |
| WMSA | Silt fence | DRA 1 & 2 | Silt fence fixed. looks good. |
| Quarry/WMSA | YY Bottom toe | SB | Silt fence is in place & in good condition |
| Quarry | Berm/pit | Stockpiles | Roads graded towards pit. |
| Surge pile | CD & SB | CD & SB | CD & SB are in place. looks good. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* YY – Yeager yard.
* CD – Check dams
* WB – water bars.
* SB – Sediment basin

## Monthly Inspection Log

**Inspector** MANNNATH SHUBHANGAPPA **Date** 10/25/19

**Time** 0800

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & french drain | — | Working. Automation Contactor working |
| EMSA | P30 vault pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berms | Stockpile by Crusher | Stockpiles are within the berms. Berm is in good condn. |
| WMSA | Yeager Yard | Hydroseeding | Hydroseeding looks good. Vegetation is holding. |
| WMSA | Check dams/WB | Stockpiles | Completed. looks good. |
| WMSA | Silt fence | slope/area 1&2 | 90% complete |
| Quarry | Berms/pit | Stockpiles | Graded roads to drain water to pit. |
| Quarry/WMSA | YY Bottom | Sediment Basin | Grade and Silt fence in good condition. |
| Surge pile | CD & Sediment Basin | Sediment Basin | @Sediment basin & Check dams are in great condition. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* WB - water bars
* CD - Check dam.

**Monthly Inspection Log**

Inspector MANJUNATH SHIVALINGAPPA

Date 09/12/19

Time 0830

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & French drain | — · — | working; Automation - Scheduling Contractor to work on Automation |
| EMSA | P30 Vault pipe line | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by crusher | Stockpiles away from the berm. Berms in good condition |
| WMSA | Yeager Yard | Hydroseeding | Hydroseeding looks good. Vegetation on most of the Yeager Yards |
| WMSA | Check dams/WB | Stockpiles | Check dams in good condn. Need to Construct waterbars before Oct end. |
| WMSA | Silt fence | Slope/PCRA152 | Silt fence needs to be repaired on the slope. Trying to find a Contractor |
| Quarry | Berms/Pit | Stockpiles | who is willing to work in the area. |
| | | | → Graded (Roads) to drain to the pit. OK ✓ |
| Quarry/ WMSA | Yeager Yard Bottom | Sediment Basin | Sediment basin looks good. Silt fence in good condition. |
| Surge pile | Check dam & Sediment basin | Sediment basin | Surge Pile in good condition. Sediment basin looks good. |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 08/13/2019

Time 0900

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 valut & Frenchdrain | P30 to P11 | Both pump work. Good condition. |
| EMSA | P30 vault pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by Crusher. | Medium grade stockpile away from the berm. |
| WMSA | Yeager Yard | Hydroseeding | Vegetation looks to be in great condn. |
| WMSA | CD/WB* | Stockpiles | Checkdams are in place. WB will be Constructed close to Rainy Season |
| WMSA | Silt fence | Slope/pad 1&2 | Could not find Contractors willing to work in this area. |
| Quarry | Berms/pit | Stockpiles | Roads haul grades such that water will flow to the pit |
| Quarry/WMSA | YY* Bottom | Sediment Basin | Silt fence in place. |
| Surge pile | Check dams & Sediment basin | CD & Sediment basin | CD's needs cleanup. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* CD – Checkdams
WB – Water bars
YY – Yeager Yard

**Monthly Inspection Log**

Inspector Manjunatha Shivalingappa

Date 07/12/2019

Time 0830

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & frenchdrain | P30 to P11 | Good condition - pumps working. |
| EMSA | P30 vault pipe line | P30 to P11 | Pipeline in good condition. |
| Quarry | Berm | Stockpile by hopper | Medium grade Stockpile is away from berm. |
| WMSA | YY | Hydroseeding | Vegetation is looking good. |
| WMSA | CD/WB | Stockpiles | Checkdams and waterbars looks good. needs work. |
| WMSA | Silt fence | Slope/PCRA 1&2 | Trying to find contractors to fix silt fence. |
| Quarry | Berms/Pit | Stockpiles | Roads graded towards the pit. |
| Quarry/WMSA | YY bottom "toe" | SB | Silt fence is in place. accepted by Sce. |
| Surge pile | CD & SB | CD & SB | CD's requires cleaning. will be cleaned before the rains |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* YY - Yeagr Yard
CD - Check dams
WB - water bars
SB - Sediment Basin.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 06/25/2019

Time 0800

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & pipe | P30 to P11 | It's in good condition. pump work. |
| EMSA | P30 vault pipe line | P30 to P11 | Pipeline in good condn. |
| Quarry | Berm | Stockpile by hopper | Medium grade stockpile is away from berm |
| WMSA | YY | Hydroseeding | Vegetation has grown good. |
| WMSA | CD/WB | Stockpiles | CD & WB looks good. Needs work. |
| WMSA | Silt fence. | Slope Perim & 2 | Contractors not available to do the job. |
| Quarry | Berm/pit | Stockpiles | Graded roads to direct water to pit |
| Quarry/WMSA | YY toe | SB | Silt fence in place. |
| Surge pile | CD & SB | CD & SB | CD's require cleaning. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

# YY - Yeager Yard.
CD - Check dams
WB - Water Bars
SB - Sediment Basins.

**Monthly Inspection Log**

Inspector Manjunath Shivalingappa

Date 05/30/2019
Time 0800

**Note overall condition of area, including drainage, operations, and/or containment systems. Identify specific elements needing attention. Note what actions were taken. Use additional sheets, if necessary.**

| Area Inspected | Drainage Structures [1] | Operations Systems [2] | Comments |
|---|---|---|---|
| EMSA | P30 vault & ED | P30 to P11 | Pumps working. |
| EMSA | P30 vault pipeline | P30 to P11 | Pipeline in good condition. |
| Quarry | Berms | Stockpile by hopper | Medium grade stockpile is away from the berm. |
| WMSA* | YY | Hydroseeding | Hydroseeding looks great! |
| WMSA | CD/WB | Stockpiles | CD & WB looks good. needs maintenance. |
| WMSA | Silt fence | Slope/DCRA #2 | Contractors not willing to work in this area. |
| Quarry | Berm/pit | Stockpiles | Roads are graded to direct water to pit |
| Quarry/WMSA | YY bottom toe | SB | Silt fence is in place. |
| Surge pile | CD & SB | CD & SB | CD's requires cleanup. |
| | | | |
| | | | |

[1] Includes drainage ditches, swales, other BMPs

[2] Includes stormwater controls, berms, ground surface, slopes

[3] Inspection also required following event-driven incident within 24 hours of being able to safely access the area.

* YY – Yeager Yard
CD – Check dams
WB – water bars
SB – Sediment basins

Annual Inspection: Lehigh Permanente

Inspector: DW and GW (Golder)

Date: 9/28/2020 and 12/15/2020

Areas Inspected: WMSA, EMSA

| Description | Condition | Comments/Corrective Actions |
|---|---|---|
| Signs of erosion, such as erosion rills or washout along drainage swales and slopes? | No | Drainage swales in good condition |
| Permanente Creek observations adjacent to the WMUs | Creek observed | Limited flow in creek by WMSA and EMSA; water is clear, no odor |
| Check dams on haul roads | In place | Good condition, regularly maintained per Lehigh |
| Erosion of blankets, straw wattles, and silt fence installations | In place | Installed along portions of WMSA and EMSA, Lehigh to review during wet season |
| Berms where stockpiles are placed | Yes | Berms are in place along haul roads |
| Seepage – new seepage areas or changes in seepage area, color, clarity | None | No seepage observed |
| Visual observations - surface cracking, bulging, depressions, sink holes, distressed vegetation | None | None noted at WMUs. No signs of release from WMUs |
| Conveyance Systems | Yes | Two pipelines, Fr drain and sed pond, inspected by walking length – where safely accessible. Appear to be in good condition. No signs of breakage, not operational b/c no water |

**APPENDIX F**

# Corrective Action Monitoring

Stantec

# Letter

| | | | |
|---|---|---|---|
| To: | Talia Flagan | From: | Tristan Rhodes |
| | Lehigh Permanente, Cupertino, CA | | Stantec, San Jose, CA |
| File: | Slope Stability Monitoring SOP | Date: | December 29, 2020 |

**Reference: Yeager Yard Slope Stability Monitoring Standard Operating Procedures**
**Annual Monitoring Summary**

This letter addresses the annual slope inspection monitoring summary of regular inspection events conducted between March 16, 2020 to December 27, 2020. Routine inspections are performed in part to address the request for additional information related to Lehigh's Proposed OM&C Addendum and subsequent Corrective Action Plan (CAP).

In response to the Waterboard's July 9, 2019 Notice of Violation (NOV) and subsequent request for additional information related to Lehigh's Proposed OM&C Addendum, Lehigh submitted a Corrective Action Plan (CAP) in January 2020. In the February 13, 2020 letter response to Lehigh's CAP, the Waterboard generally concurred with the actions and updates with the following minor conditions summarized below:

A. The slope stability monitoring outlined in item 4 (*Item 4: Data related to seeps and slope stability was presented and monitoring was added to the schedule outlined in the SWPPP*) is associated with the OM&C required by the WDRs. Therefore, reporting of monitoring results and analysis should be included in the self-monitoring reports (SMRs) required of that Order.

B. Similarly, the standard operating procedures outlined in item 5 (*Item 5: The OM&C was updated to outline plans for operational changes (e.g., road construction and modification to stockpiles) along creek-facing slopes to maintain stability, including conducting a desktop analysis, site reconnaissance, and (as needed) consultation with a licensed professional geologist or engineer prior to the start of work*) are associated with the OM&C and therefore reporting of the process should be included in the SMRs required of the WDRs.

The letter also stated that "SMRs must be certified by a licensed professional geologist or engineer as indicated in Specification 2 of the WDRs. Therefore, the slope stability monitoring and operational change planning outlined in items 4 and 5 should be conducted under the oversight of a licensed professional".

Routine inspections of the Yeager Yard slide and sediment basin were performed onsite by Lehigh personnel, beginning March 16, 2020. Prior to finalization of the SOP, monitoring by site personnel followed guidelines developed internally by Lehigh.

Stantec's SOP expanded upon the internally developed guidelines developed by Lehigh, to include additional considerations and areas for observation. Stantec provided Lehigh with a Slope Stability Monitoring Standard Operating Procedure (SOP) on May 11, 2020 to outline monitoring and discharge observations to partially satisfy these requirements from the Waterboard.

**Reference:** **Yeager Yard Slope Stability Monitoring Standard Operating Procedures – Annual Monitoring Summary**

Stantec also requested onsite personnel undergo training with Stantec personnel to cover inspection procedures and regions. Additionally, Stantec required all inspection reports to be delivered to Stantec within 24 hours of the completed inspection, to compare the weekly onsite observations with the observations of Stantec Engineering Geologists.

Due to the uncertainties of access and protocol as a result of the 2020 Corona-virus (Covid 19) pandemic, onsite training of Lehigh personnel could not be conducted. Additionally, delivery of weekly or more frequent monitoring reports within 24 hours of completion to Stantec did not occur. However, review of all site inspections performed during this period suggests that the site inspections were performed according to the developed SOP, and results appear to coincide with the findings of monitoring performed by Stantec personnel. During the monitoring period from March 16 to December 27, 2020, no movement of the slide was observed by Lehigh personnel.

Stantec is scheduling the SOP training with Lehigh staff in late December/early January to bring the reporting and documentation into better compliance with the SOP and Waterboard requirements.

**Stantec Consulting Services Inc.**

Tristan Rhodes

CERTIFIED ENGINEERING GEOLOGIST
Tristan A. Rhodes
10/31/21
2719
STATE OF CALIFORNIA

**Tristan Rhodes** PG, CEG
Geologist

Phone: 4089211662
tristan.rhodes@stantec.com

Attachment: 03-16-2020 To 11-30-2020 Reduced Size.pdf
12-7-2020.pdf
Nov 2020- Daily.pdf

c. jennifer.vanpelt@stantec.com
paul.kos@stantec.com
gregory.gold@stantec.com




golder.com