Luhdorff & Scalmanini
Consulting Engineers

November 8, 2022 Project No. 22-2-006

David Katz
Water Control Engineer
State Water Resources Control Board
Division of Drinking Water
850 Marina Bay Parkway Bldg. P, Second Floor
Richmond CA 94804-6403

SUBJECT: REQUEST FOR SITING AND DESIGN CONCURRENCE - BAY AREA VIPASSANA CENTER TEST WELL NO. 1 – GILROY, CALIFORNIA

Dear Mr. Katz:

The Bay Area Vipassana Center (BAVC) Test Well No. 1 was constructed to assess the viability of utilizing groundwater to meet the needs of the planned BAVC. Based on pump and water quality testing of the test well, it was demonstrated that groundwater is a viable option to meet the requirements of the BAVC. The BAVC wishes to utilize the test well as a community supply well to meet the needs of the planned center.

As a first step in ultimately permitting the test well as a community supply well, Luhdorff & Scalmanini Consulting Engineers (LSCE), on behalf of the BAVC, respectfully requests concurrence review from your office regarding the siting and design of Test Well No. 1.

Per your July 6, 2022 email, LSCE has assembled information and documentation (attached) requested from your office to consider the use of the test well as a community supply well.

The attached documents include information and documentation related to the siting, design, construction, and testing of the BAVC Well Test Well No. 1. The submittals demonstrate that the test well was sited, designed, constructed, and tested to current Department of Drinking Water (DDW) requirements for a community supply well.

At this time, only concurrence regarding the siting and design of the well is being requested.

The BAVC is currently working with the County of Santa Clara, Department of Planning and Development (County) regarding a project Use Permit and completion of required documentation under the California Environmental Quality Act (CEQA).

It is fully understood that concurrence from your office regarding well siting and design does not constitute an approval to use the well for domestic supply without submission and approval of required CEQA documentation, County Use Permit, permits from other departments or agencies with jurisdiction, plans and specifications for well and well site improvements, well equipping, treatment system, distribution system; water supply permit application, and other items required by DDW. Concurrence from your office will only allow for continued project planning and design activities.

If you have any questions regarding the information attached herein or in the attached, we will be pleased to respond.

Regards,

Luhdorff & Scalmanini
Consulting Engineers

Scott Lewis, PG
Principal Geologist

Cc: Sandeep Nayyar
Brian McNamara

Attachments:

- Bay Area Vipassana Center Test Well Installation and Testing Report
- Compliance with California Code of Regulations Related to the Siting, Design, Materials, Construction, and Testing of the BAVC Well Memo
- Additional Project Documentation

Page Left Blank

Luhdorff & Scalmanini
Consulting Engineers

July 26, 2022
File No. 22-2-006

Mr. Sandeep Nayyar
530 Lawrence Expressway, No. 365
Sunnyvale, CA 94085

SUBJECT: BAY AREA VIPASSANA CENTER TEST WELL INSTALLATION AND TESTING REPORT

Dear Mr. Nayyar,

Luhdorff and Scalmanini, Consulting Engineers (LSCE) is pleased to submit this summary report of our investigation, installation, and testing of the Bay Area Vipassana Center (BAVC) Test Well No. 1. The purpose of the investigation and testing was to determine if a well could be completed in the alluvial aquifer at the BAVC that would meet projected project demands and to determine if, and to what extent, operation of the well may impact other nearby wells.

Summary

Two boreholes were drilled at the BAVC project site located west of the intersection of Redwood Retreat Road and El Matador Drive in Gilroy California (**Figure 1**). The materials encountered in borehole #1 were determined not to be favorable for the construction of a production well, however, a monitoring well (MW-1) was constructed in the borehole in order to allow for long term groundwater level monitoring. The materials encountered in borehole #2 were determined to be favorable for the construction of a test well. A six-inch diameter test well (TW-1) was constructed in the reamed borehole to a depth of 155 feet below ground surface (bgs) with screen sections between 70 and 150 feet bgs. TW-1 was pump tested for 72-hous at a rate of 15 gallons per minute (gpm). During the pump test, water levels in accessible nearby wells were monitored. Test pumping results demonstrated that TW-1 could meet projected project water demands without impacting adjacent wells. The siting, borehole drilling, monitoring well and test well construction, and test pumping of the wells is detailed below.

Well Siting

The locations of both boreholes were selected to intersect the maximum thickness of alluvial material on the project site and to comply with minimum setback requirements from proposed project sanitary features (septic/storm water system components) and well head control zone requirements per the State Water Resources Control Board, Division of Drinking Water (DDW) and the Santa Clara County Department of Environmental Health (SCCDEH) (**Figure 2**). LSCE utilized a preliminary project layout prepared by MH Engineering Company (December 2021) that depicted planned project septic and

stormwater infrastructure to site the boreholes with at least 100-feet separation from septic and stormwater infrastructure as required by DDW for community supply wells.

MW-1

Borehole #1 was drilled by Guardino Well Drilling (C-57 license #664960) of Morgan Hill, California under Valley Water permit number C20220503003. An 8-inch diameter borehole was drilled using both the air and mud rotary drilling methods to a depth of 140 feet bgs (**Figure 3**). The lithology intersected by the borehole included clayey sands and gravels to approximately 90 feet bgs and mudstone from 90 to 140 feet bgs. Based on inspection of the drill cuttings and lack of water in the borehole, it was determined that materials encountered in the borehole would not likely transmit water in sufficient quantity to meet projected project demands. A three-inch diameter, Schedule 40, PVC casing was installed in the borehole to a depth of 100 feet bgs to serve as a monitoring well. The casing was perforated with 0.032-inch slots from 75-95 feet bgs. A gravel envelope was installed in the annulus between the borehole wall and the casing up to a depth of 50 feet bgs. A Valley Water inspector witnessed the placement of a 10.3 sack sand/cement seal in the annulus from 50 feet bgs to ground surface.

TW-1

Borehole #2 was drilled by Guardino Well Drilling under Valley Water permit number C20220519001. An 8-inch diameter borehole was drilled using both the air and mud rotary drilling methods to a depth of 160 feet bgs (**Figure 4**). The lithology intersected by the borehole included gravely clay to a depth of 20 feet bgs, poorly indurated sand and gravel from 20 to 60 feet bgs, clay from 60 to 70 feet bgs, and sand and poorly indurated sand from 70 to 160 feet bgs. Based on inspection of the drill cuttings and presence of water in the borehole, it was determined that the materials encountered in the borehole could likely transmit water in sufficient quantity to meet projected project demands.

The borehole was reamed to a diameter of 14-inches to accommodate a well casing. A six-inch diameter, SDR 21, PVC casing was installed in the borehole to a depth of 155 feet bgs. The casing was perforated with 0.032-inch slots from 70 to 95, and 130 to 150 feet bgs. A gravel envelope was installed in the annulus between the borehole wall and the casing from 160 to 125 and 115 to 52 feet bgs. A bentonite chip seal was installed in the annulus from 125 to 115 feet bgs. A two-foot bentonite chip transition seal was placed in the annulus from 52 to 50 feet bgs. A Valley Water inspector witnessed the placement of a 10.3 sack sand/cement seal in the annulus from 50 feet bgs to ground surface.

After the seal set, the well was developed by airlifting until the water produced was clear and sand free.

Test Pumping

The purpose of the test pumping TW-1 was to determine if the well could yield sufficient water to meet the projected project maximum daily demand (MDD) of 8,440 gallons per day (gpd). The well was pumped for 72 hours to assess the long-term pumping water level and sustainable yield of the well.

Water levels in several accessible nearby wells were monitored during the pumping test using pressure transducers to determine if pumping of the test well would result in drawdown in those wells. The following wells were monitored during the pumping test (**Figure 1**):

- Happy Acres Mutual Water Company Well No. 1 (HVNWC Well No. 1)
- BAVC irrigation well
- BAVC Monitoring Well No. 1
- Swenson Well

A temporary submersible pump was installed into the well between the well screen sections (120 feet bgs) by Guardino Well Drilling for the pump test. The discharge line from the pump was outfitted with a totalizing flow meter and gate valve to regulate flow. Discharge from the well during the test was directed via hose approximately 200 feet from the well. The target flow rate for the pump test was 15 gallons per minute (gpm).

The static water level in the well before pumping began was 37.75 ft below the top of the well casing. The pump test began at 8:10 am on June 7, 2022. After approximately 10 minutes of pumping, the discharge was measured using a 20-gallon container and a stopwatch to confirm that the installed flow meter was accurately measuring the flow rate. The installed flow meter was indicating a flow rate of 15 gpm while the container/stopwatch method indicated that the actual flow rate was 22 gpm. The flow was adjusted to 15 gpm using the container method to measure flow. The flow rate was regularly confirmed with the container and stopwatch throughout the remainder of the test. After the flow rate was adjusted to 15 gpm, the installed pressure transducer was reset and reinstalled in the well to ensure that it would remain submerged during the entire 72-hour test. Reliable water levels were not collected during the first hour of the test due to the time spent adjusting the flow rate and transducer. After approximately 9 hours of pumping, a safety switch on the generator powering the pump was tripped resulting in the brief shutdown of the pump. The pump was immediately restarted.

Water level data collected by the pressure transducers installed in TW-1 and the monitored wells was downloaded, barometrically compensated, and plotted on hydrographs. **Figure 5** shows the pumping and recovery water levels in TW-1. During the pumping test, the water level declined at a relatively constant rate for approximately the first 7 hours, after which the pumping water level was constant between approximately 81 and 82 feet bgs for the reminder of the test. **Figure 6** shows the water levels in the test well and the monitored wells during test pumping. There were no discernable impacts on water levels in the monitored wells due to pumping of the test well. Approximately 1 foot of drawdown was observed in the BAVC irrigation well in response to pumping of the HVMWC Well No. 1. The approximately 2 feet of water level decline observed in the HVMWC No. 1 in the last 16 hours of the pump test is not believed to be due to pumping of the test well because similar water levels were observed in the well before pumping of TW-1 began.

Approximately 8-hours after pumping ended, the water level TW-1 recovered to 36.69 ft bgs, representing a 96% recovery of the pretest water level.

Approximately 21,600 gallons of water was pumped from the well each of day of the three-day test which equates to 2.5 times the projected project MDD of 8,440 gallons. At a pumping rate of 15 gpm, the projected project MDD would be satisfied with 9.4 hours of pumping. Based on the lack of any response

in the monitored wells to pumping TW-1 for 72-hours, no impacts to water levels in the monitored wells would be expected due to pumping to meet projected project demands.

Water Quality

Water samples were collected from TW-1 on July 18, 2022, using a temporary submersible pump for Title 22 Drinking Water analysis. The well was sampled after volume equal to three wet casing volumes was pumped and field parameter stabilization. Samples were collected in laboratory suppled bottles and submitted to California Laboratory Services (ELAP No. 1322) for analysis.

Results of water quality testing showed that the water produced from TW-1 meets all Title 22 requirements for drinking water with the exception of manganese which was measured at 190 µg/L, which exceeds the maximum contaminate level (MCL) of 50 µg/L (**Table 1**).

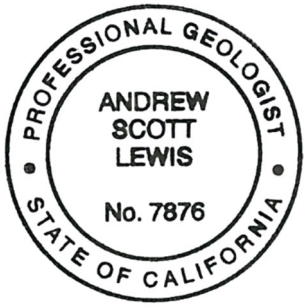
If you should have any questions, or would like additional information, we will be pleased to respond.

Sincerely,

LUHDORFF AND SCALMANINI,
CONSULTING ENGINEERS

Scott Lewis

Scott Lewis, P.G
Senior Principal Geologist



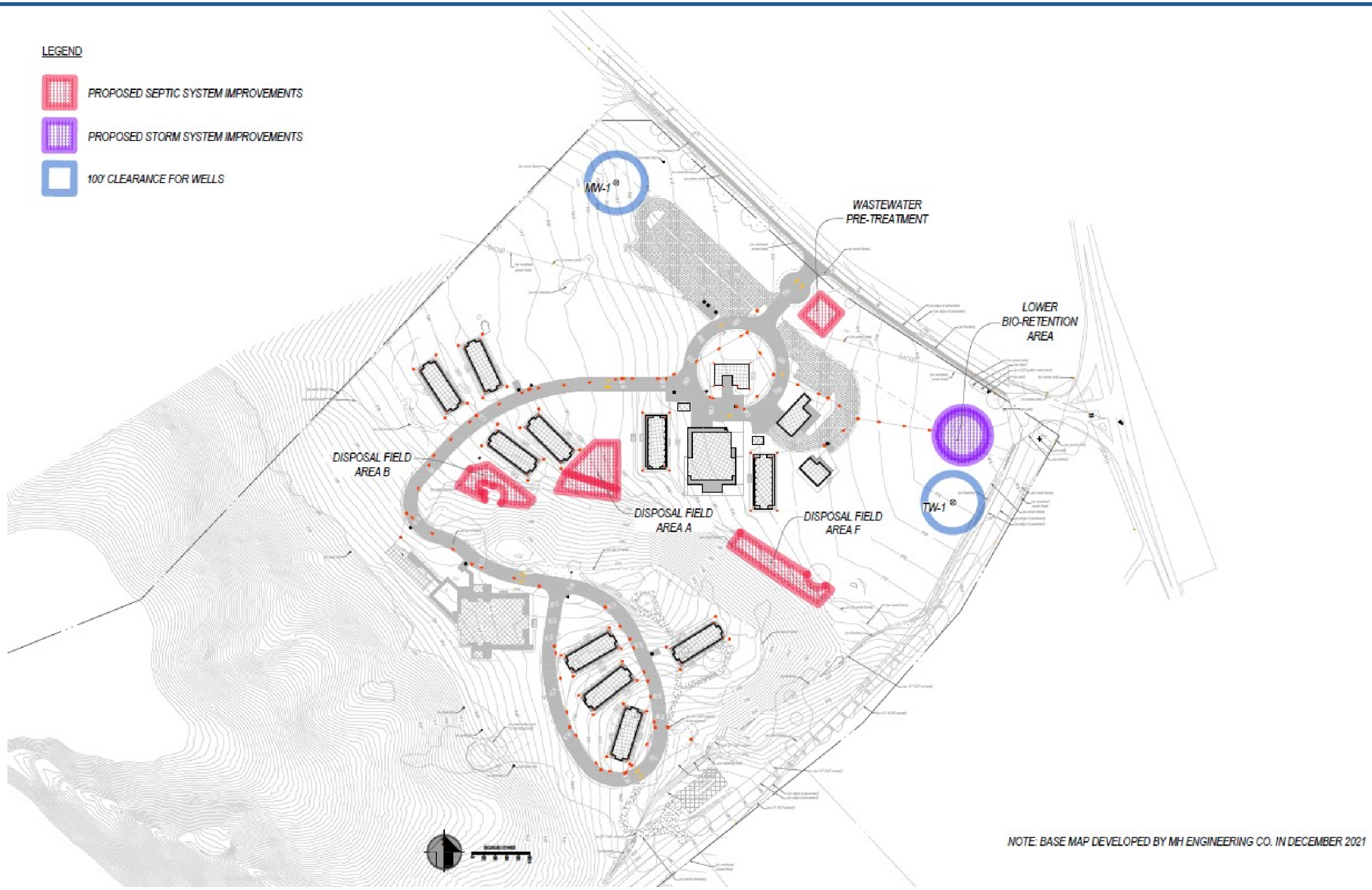
Attachments:
Figure 1: Bay Area Vipassana Center - Site Map
Figure 2: BAVC – Setback Distance Figure
Figure 3: BAVC Monitoring Well No. 1 As-Built Diagram
Figure 4: BAVC Test Well No. 1 As-Built Diagram
Figure 5: BAVC Test Well No. 1 Pump Test Hydrograph
Figure 6: BAVC Pump Test – Multiple Well Hydrograph
Table 1: BAVC Test Well No. 1 Water Quality Summary Sheet

Luhdorff & Scalmanini
Consulting Engineers

Bay Area Vipassana Center - Site Map

BAVC Water System
Gilroy, CA

Figure 1-6



Luhdorff & Scalmanini
Consulting Engineers

BAVC - Setback Distance Figure

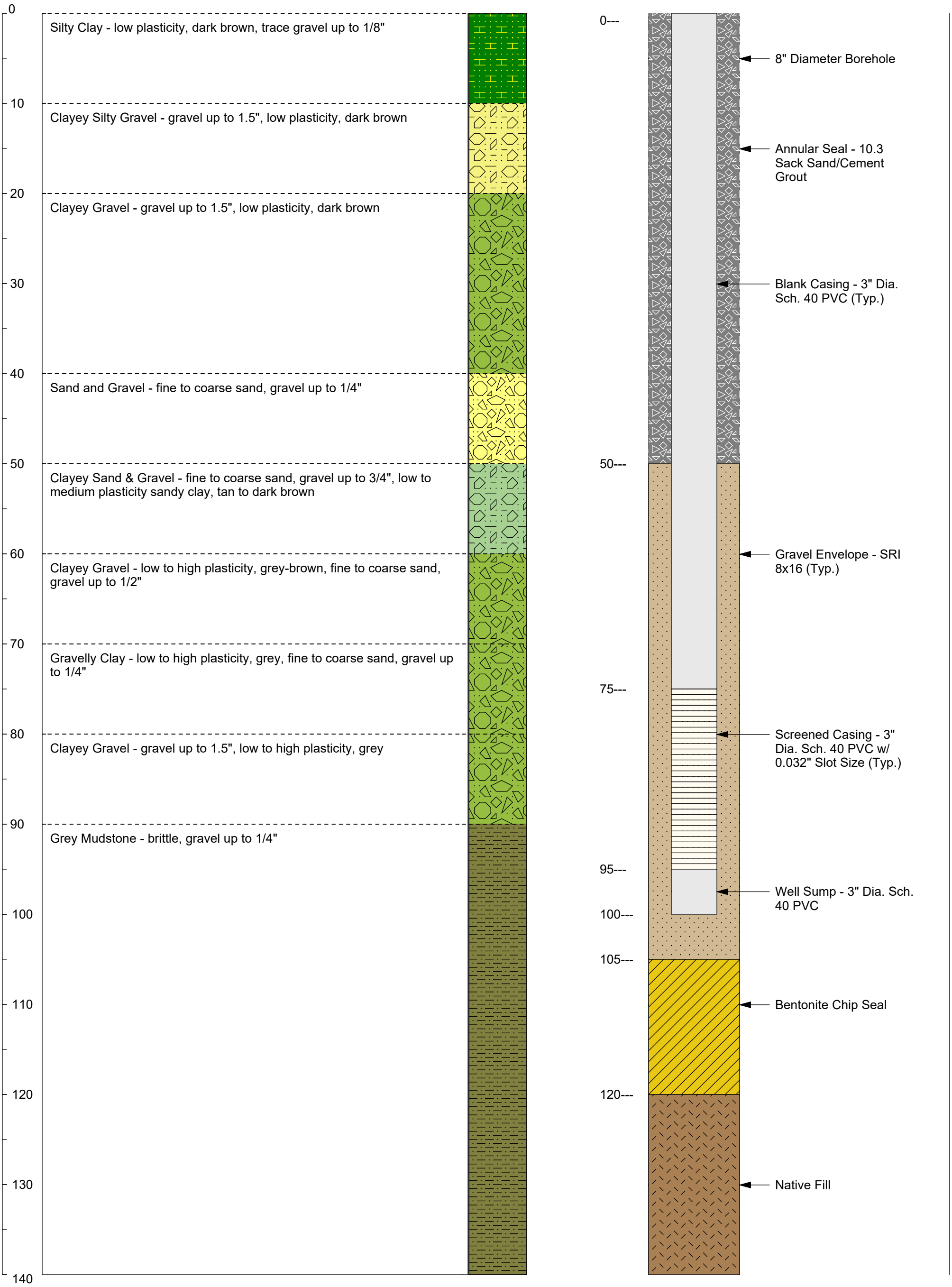
BAVC Water System
Gilroy, CA

Figure 2-6

Client: Bay Area Vipassana Center	**Lat/Long:** 37.027141/-121.658757
Project Name: BAVC Water System	**Well Name:** BAVC Monitoring Well
LSCE #: 22-2-006	**Drill Date:** 5/13/2022 - 5/27/2022
Location: Gilroy, CA	**Drilling Method:** Air & Mud Rotary
Geologist: R. Sanchez, GIT	**Driller:** Guardino Well Drilling Inc.

Luhdorff & Scalmanini
Consulting Engineers

Depth (ft bgs)	Lithologic Description	Strat-Column	As-Built Well Profile

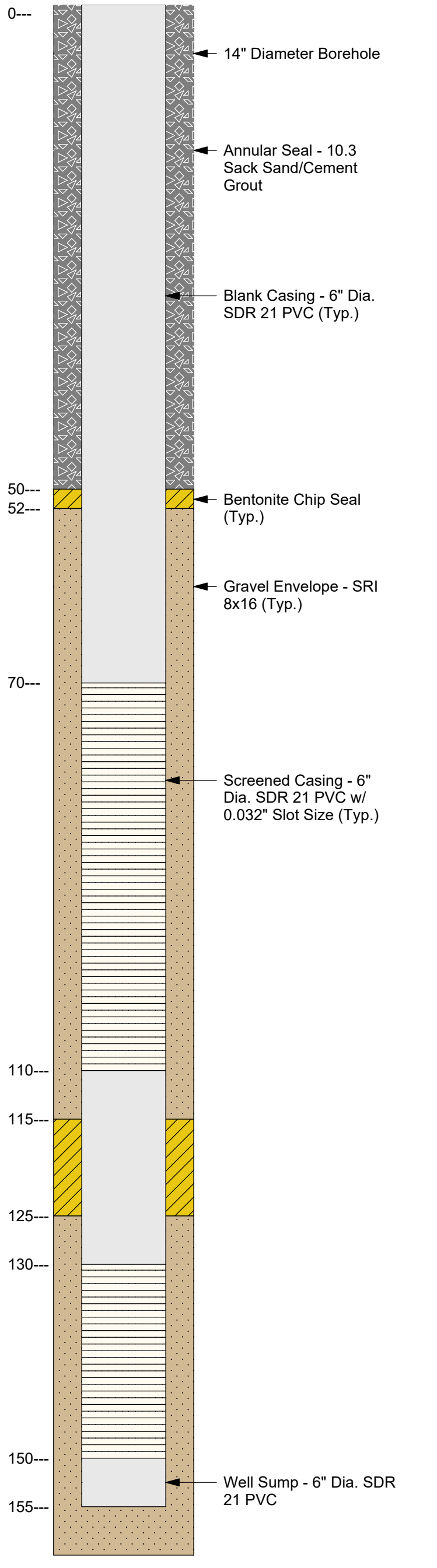


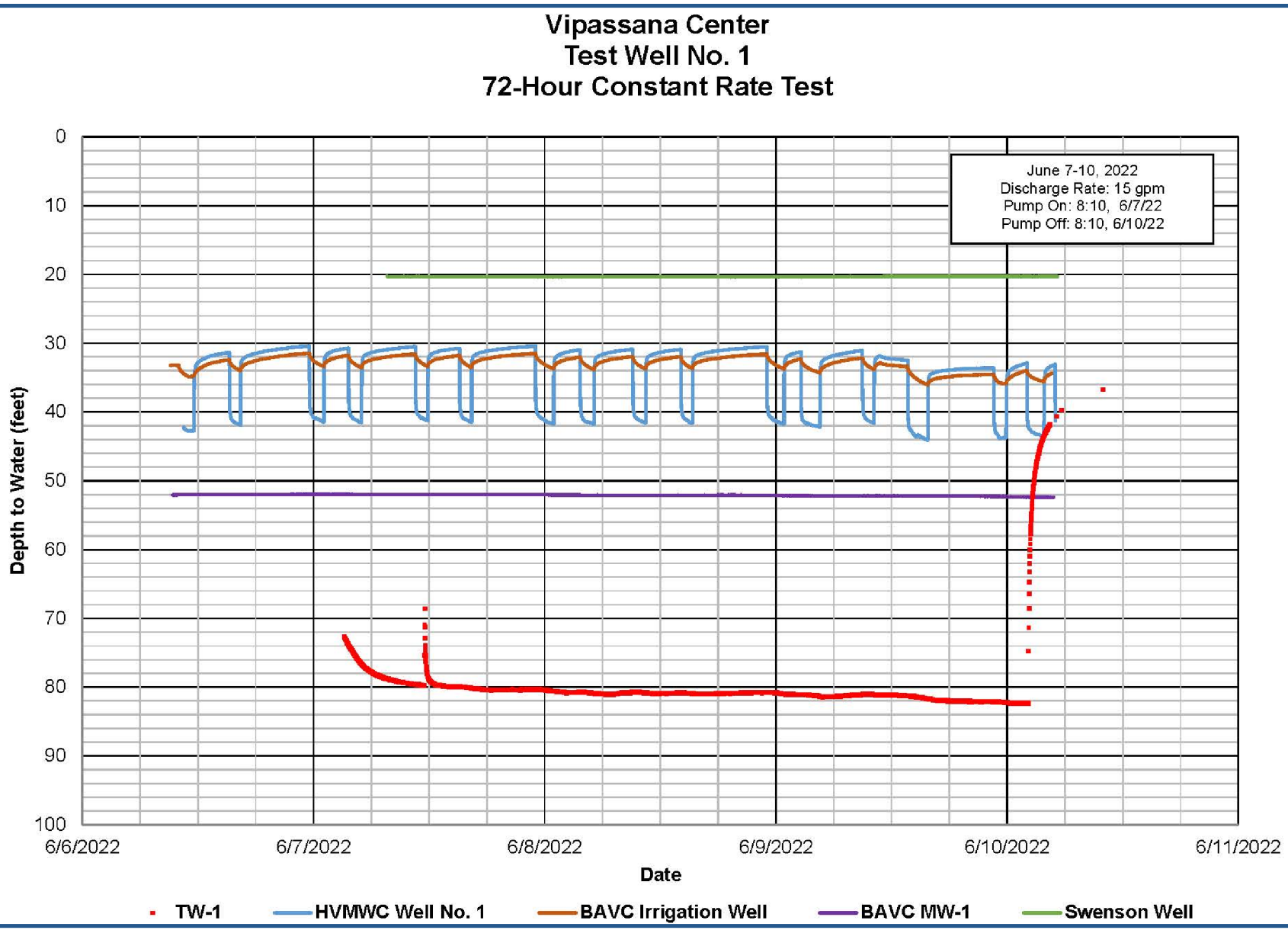
Client: Bay Area Vipassana Center	**Lat/Long:** 37.025742/-121.656972
Project Name: BAVC Water System	**Well Name:** BAVC Test Well
LSCE #: 22-2-006	**Drill Date:** 5/24/2022 - 5/27/2022
Location: Gilroy, CA	**Drilling Method:** Air & Mud Rotary
Geologist: B. Kearney	**Driller:** Guardino Well Drilling Inc.

Luhdorff & Scalmanini
Consulting Engineers

Depth (ft bgs)	Lithologic Description	Strat-Column	As-Built Well Profile

0
Gravelly Clay - low plasticity, dark brown, small gravel, little sand
10
20
Sandy Gravel - small to large gravel, sub-angular to sub-rounded, fine to very coarse sand, quartz rich, some chips of poorly indurated orange sandstone
30
40
50
60
Clay - non-plastic grey mudstone
70
Sand - fine to very coarse orange sand, quartz rich, some chips of poorly indurated orange sandstone
80
90
100
Sand - fine to coarse, grey, poorly indurated sandstone
110
120
130
Sand - coarse to very coarse, quartz rich
140
150
Sand - very fine to medium, pale grey, poorly indurated sandstone
160



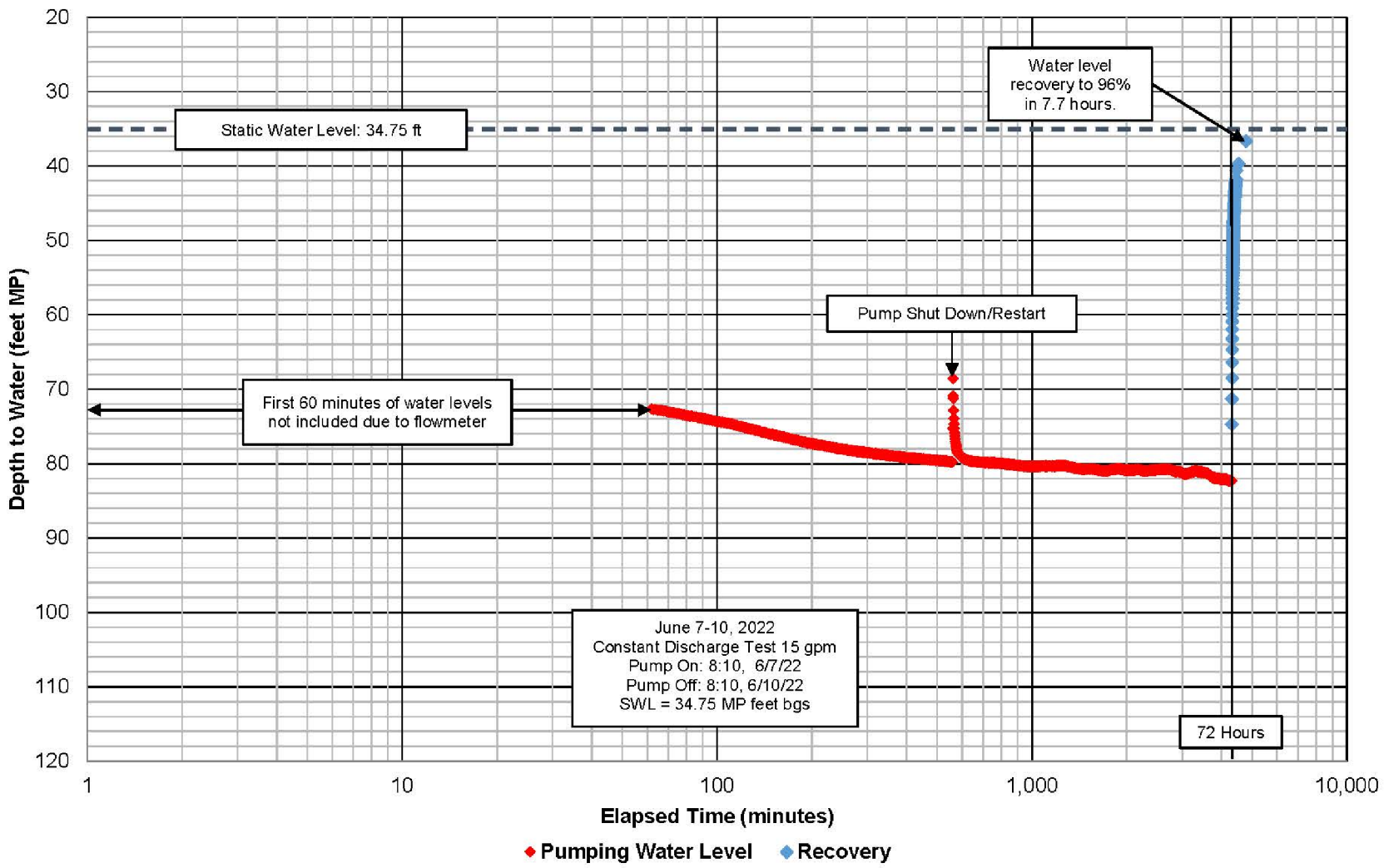


Luhdorff & Scalmanini
Consulting Engineers

BAVC Pump Test - Multiple Well Hydrograph

BAVC Water System
Gilroy, CA

Figure 6-6



Luhdorff & Scalmanini
Consulting Engineers

BAVC Test Well No. 1 Pump Test Hydrograph

BAVC Water System
Gilroy, CA

Figure 5-6

Table 1. BAVC Test Well No. 1
Water Quality Summary Sheet

ANALYTE	UNITS	REPORTING LIMIT	METHOD	MCL	7/18/2022
CATIONS					
Calcium	mg/L	1.0	200.7		45
Magnesium	mg/L	1.0	200.7		27
Potassium	mg/L	1.0	200.7		1.7
Sodium	mg/L	1.0	200.7		39
Hardness as $CaCO_3$	mg/L	1.0	200.7		230
ANIONS					
Bicarbonate Alkalinity	mg/L	5.0	SM 2320B		200
Carbonate Alkalinity	mg/L	5.0	SM 2320B		ND
Chloride (Cl)	mg/L	2.5	300.0	250/500[2]	44
Cyanide (total)	µg/L	100	SM4500-CNE	150	ND
Fluoride	mg/L	0.10	300.0	2	ND
Hydroxide Alkalinity	mg/L	5.0	SM 2320B		ND
Nitrate (as N)	mg/L	0.40	300.0	10	ND
Nitrate/Nitrite (as N)	mg/L	0.40	300.0	10	0.61
Nitrite (as N)	mg/L	0.40	300.0	1	ND
Sulfate (as SO_4)	mg/L	2.5	300.0	250/500[2]	49
Sulfide	mg/L	1.0	SM4500-S F		ND
Total Alkalinity	mg/L	5.0	SM 2320B		200
Perchlorate	µg/L	2.0	314.0	0.006	ND
PHYSICAL PARAMETERS					
Color (A.P.H.A)	Color Units	1	SM 2120B	15[2]	ND
pH	pH units	0.01	SM 4500-H B	6.5/8.5[4]	6.9
Methylene Blue Active Substance	mg/L	0.10	SM 5540C	0.5[2]	ND
Specific Conductance	µmhos/cm	1.0	SM 2510 B-1997	900/1,600[2]	610
Total Dissolved Solids (TDS)	mg/L	10	SM 2540C	500/1,000[2]	390
Odor	TON	1	140.1	3	ND
Turbidity	NTU	0.10	180.1	5[2]	0.45
INORGANICS					
Aluminum	µg/L	50	200.7	1000[1]/200[3]	ND
Aluminum (Dissolved)	µg/L	50	200.7		ND
Antimony	µg/L	4.0	200.8	6	ND
Arsenic	µg/L	2.0	200.8	10	ND
Arsenic (Dissolved)	µg/L	2.0	200.8		ND
Barium	µg/L	100	200.8	1000	150
Beryllium	µg/L	1.0	200.8	4	ND
Boron	µg/L	100	200.8	1000[3]	250
Cadmium	µg/L	1.0	200.8	5	ND
Chromium (Total)	µg/L	10	200.8	50	ND
Chromium (Dissolved)	µg/L	10	200.7		ND
Hexavalent Chromium	µg/L	1.0	218.6	50	ND
Copper	µg/L	50	200.8	1300[2]	ND
Iron	µg/L	100	200.7	300[2]	ND
Iron (Dissolved)	µg/L	100	200.7		ND
Lead	µg/L	5.0	200.8	15[3]	ND
Manganese	µg/L	20	200.8	50[2]	**190**
Manganese (Dissolved)	µg/L	20	200.7		160
Mercury	µg/L	1.0	245.1	2	ND
Nickel	µg/L	10	200.8	100	ND
Selenium	µg/L	5.0	200.8	50	ND
Silver	µg/L	10	200.8	100[2]	ND
Thallium	µg/L	1.0	200.8	2	ND
Vanadium	µg/L	3.0	200.8	50[3]	ND
Zinc	µg/L	50	200.8	5000[2]	ND
RADIOCHEMISTRY					
Gross Alpha	pCi/L	1.04	900.0	15	4.28
Gross Beta	pCi/L	2.40	900.0		4.11
Uranium	pCi/L	0.02	908.1	20	2.21
Ra 226	pCi/L	0.89	903.1		0.73
Ra 228	pCi/L	0.15	904.0		1.29
Ra 226 + Ra 228	pCi/L			5	2.02
Strontium-90	pCi/L	0.36	905.0	8	0.26
Tritium	pCi/L	186	906.0	20,000	87
OTHER ANALYSES					
Asbestos	MFL	0.18	600/R-94/134	7[1]	ND
Purgeable Organic Compounds (VOCs)	µg/L	*	524.2		ND
Semi-Volatile Organic Compounds (SVOCs)	µg/L	*	525.2		ND
EDB and DBCP	µg/L	*	504.1		ND
Nitrogen/Phosphorus Pesticides	µg/L	*	507		ND
Chlorinated Pesticides and PCB's	µg/L	*	508		ND
Chlorinated Acids	µg/L	*	515.3		ND
DEHA/DEHP	µg/L	*	525		ND
Carbamates	µg/L	*	531.1		ND
Glyphosate	µg/L	5	547	700	ND
Endothall	µg/L	5	548.1	100[1]	ND
Diquat and/or Paraquat	µg/L	*	549.2	20	ND
Benzo-a-pyrene	µg/L	0.10	550	0.2	ND
2,3,7,8-TCDD (Dioxin)	pg/L	5	1613B	700[1]	1.88
1,2,3-Trichloropropane	µg/L	0.0050	SRL 524M-TCP	0.0050	ND
Total Trihalomethanes (THM)	µg/L	0.50	524.2	80	54
Haloacetic acids (five) HAA5	µg/L	*	552.2	60	13
Bromate	µg/L	5	300.1	10	ND
Chlorite (ClO2)	mg/L	0.02	300	1.0	ND

[1] - Primary MCL
[2] - Secondary MCL (recommended/upper range)
[3] - Notification Level
[4] - Suggested lower/upper acceptable range
* - Various Reporting Limits
ND = Non-Detect

Luhdorff & Scalmanini
Consulting Engineers

Page Left Blank

Luhdorff & Scalmanini
Consulting Engineers

November 3, 2022 Project No. 22-2-006

Mr. Sandeep Nayyar
530 Lawrence Expressway, No. 365
Sunnyvale, CA 94085

SUBJECT: Compliance with California Code of Regulations Related to the Siting, Design, Materials, Construction, and Testing of the BAVC Well

Dear Mr. Nayyar,

Luhdorff & Scalmanini, Consulting Engineers (LSCE) has prepared this letter detailing compliance with the relevant California Code of Regulations (CCR), California Department of Water Resources (DWR), and American Water Works Association (AWWA) regulations and standards with regard to the siting, design, materials, construction, and testing of the Bay Area Vipassana Center (BAVC) Well.

Title 22, §64560 of the CCR states that community supply wells must be constructed in accordance with DWR Bulletins 74-81/74-90 and AWWA Standard A100-20 - Water Wells. In addition, Title 22, §64560 requires (1) a source water assessment be completed for the well site, (2) documentation demonstrating that a 50-control zone around the well can be established to prevent well tampering and vandalism, (3) well plans and specifications and (4) documentation demonstrating compliance with the California Environmental Quality Act (CEQA) be submitted to the State Water Resources Control Board.

The siting, design, materials, construction, and testing of the BAVC Well as it relates to CCR, DWR, and AWWA requirements are discussed below.

Well Siting

Separation from Pollutants

DWR Bulletin 74-81/74-90 *Section 8, Well Location with Respect to Contaminants and Pollutants* lists separation distances from potential sources of contaminates or pollutants (**Table 1**).

Table 1. Bulletin 74-81 Minimum Separation from Pollutant Source

Pollutant Source	Minimum Separation (ft)
Sewer, watertight septic tank or pit privy	50
Subsurface sewage leaching field	100
Cesspool or seepage pit	150
Animal or fowl enclosure	100

In addition to the setback distances provided in Bulletin 74-81/74-90, the State Water Resources Control Board, Division of Drinking Water (DDW), also reviews well setback distances from a variety sewerage, industrial, solid waste, and other types of potential pollution sources (**Attachment 1**).

The location of the BAVC Well (**Figure 1**) currently meets or exceeds the setback distances in Bulletin 74-81/74/90 and the other DDW setback distances in **Attachment 1**. No pollution sources were identified in the vicinity of the well location. The location of planned sanitary site improvements will be located to maintain minimum separation distances from the well (**Figure 1**).

Flooding

Section 8 of Bulletin 74-81/74-90 states that the well must terminate above the floodplain of a 100-year flood. Title 22, §64560 also states that the wellhead shall terminate at least 18-inches above finished grade.

According to Federal Emergency Management Administration (FEMA), The BAVC Well is not located in a known flood area (**Figure 2**). At this time, the well head terminates less than 18-inches below existing grade. The well is currently capped. The height of the well head termination will be extended to at least 18-inches above finished grade after planned well site improvements have been completed.

Preliminary Drinking Source Water Assessment and Protection Document

Title 22, §64560 requires that a source water assessment be completed for a community supply well site consistent with Title 22, §64401.57.

A Drinking Water Source Assessment and Protection (DWSAP) document was prepared for the location of the BAVC Well (**Attachment 2**) that used well design information and the planned flow rate of the well. Results of the DWSAP indicated that groundwater pumped from the BAVC Well is not considered vulnerable to any existing contaminant plumes. Results of the DWSAP also indicate that the BAVC Well would be most vulnerable to activities that are not known to have contaminated soil or groundwater but have the potential to do so. The vulnerability rankings calculated in the DWSAP for the BAVC Well are reflective of the Possible Contaminating Activities typically found in residential and agricultural/rural settings. The Physical Barrier Effectiveness ranking from the DWSAP for the well is “M”, or “Moderate”.

Well Site Control Zone

Title 22, §64560 requires that a community supply well have an established 50-foot control zone around the well under the control of the well owner to protect it from tampering and vandalism.

The BAVC Well is located on land owned and under the control of the BAVC Center. The well is located 50 feet from the parcel boundary along El Matador Drive allowing for the establishment of a control zone (**Figure 1**). The finished well head, pumping equipment, discharge assembly, and associated equipment will be surrounded by fencing to prevent access by unauthorized personnel.

Well Design

The principal well structure design parameter considerations in Bulletin 74-81/74-91 relate to minimum annular seal depths and borehole diameter. *Section 9, Sealing the Upper Annular Space* states that the minimum annular seal depth for a community supply well shall be no less than 50 feet below ground surface.

Section 9, B, 5 Gravel Packed Wells, states that the borehole for a gravel packed well without a conductor casing shall be at least 4-inches greater in diameter than the well casing to the minimum depth of the annular seal.

The BAVC was designed and constructed as a 6-inch diameter well casing assembly set into a borehole with an inside diameter of 14-inches, resulting in an annular space of 4-inches between the casing and the borehole wall (**Figure 3**).

The BAVC Well was designed and constructed with a 10.3 sack sand/cement seal placed in the annulus between the well casing and the borehole wall from 50 ft below ground surface to the ground surface.

The design of the BAVC well meets the requirements of Section 9 Bulletin 74-81/74-90 for seal depth and annular space.

Materials

The materials used in the construction of the BAVC well meet the requirements of both Bulletin 74-81/74-90 Sections 9 and 12 and AWWA Standard A100-20, Section 4.3 as required by Title 22 of the CCR's. Materials used in the construction of the BAVC well structure (blank casing, perforated casing, gravel pack material, bentonite seal material) are NSF/ANSI/CAN 61/60 compliant. The annular sealing material mix is consistent with the requirements for sand/cement grout in both Bulletin 74-81/74-90 Section 9 and AWWA Standard A100-20, Section 4.3.

Well Casing

Blank Well Casing
Manufacture: Cresline
Material: PVC
Meets ASTM Standard: F480 - Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made of Standard Dimension Ratios (SDR), Sch 40, and Sch 80
NSF 61 Approved: Yes

Perforated Well Casing
Manufacture: Cresline
Material: PVC
Meets ASTM Standards: F480 - Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made of Standard Dimension Ratios (SDR), Sch 40, and Sch 80
NSF 61 Approved: Yes

Gravel

Manufacture: Silica Resources, Inc.
Product: SRI Supreme
NSF 61 Approved: Yes
Gradation: 8x16

Bentonite Chip Seal

Manufacturer: Baroid IDP
Product: Holeplug
NSF 60 Approved: Yes
Size: 3/8-inch chip

Sand/Cement Grout

Mix: 10.3 Sack Sand-cement grout (ASTM C150, Type 2 Cement, sand, water) (2-part sand, 1 part cement, 6 gallons of water per 94-lb sack of cement)
Batch Plant: Star Ready Mixed Quality Concrete

Construction

Well construction process requirements relevant to the BAVC Well in Bulletin 74-81 Section 9 and Appendix B include, removing of cutting/debris from the borehole before seal placement, placement of seal material using a tremie pipe, and minimum set time for annular seal material. Bulletin 74-90 Section 9, F also requires that well casings be centralized to ensure that a minimum of 2-inch annular space is maintained between the outside of the well casing and the borehole wall.

Well construction process requirements relevant to the BAVC Well are included in AWWA Standard A100-20, Sections 4.5 and 4.7.

The BAVC Well was constructed according to all relevant requirements of Bulletin 74-81/74-90 and AWWA Standard A100-20 as required by Title 22 of the CCR's. The well casing was installed into the borehole cleaned of all drill cuttings and centralized to maintain the required 2-inch separation between the well casing and borehole wall. Seal material was placed using the tremie pipe method. During seal placement, the bottom of the tremie pipe was submerged in the sealing material. No work was performed in/on the well for 24-hours after seal placement.

Well Capacity Testing

Title 22, §64554 - New and Existing Source Capacity, (f) includes the testing procedure for determining the capacity of a well completed in alluvial soils. It includes the minimum water level measurement frequency during the pumping and recovery phase of the test, minimum time a well must be test pumped (8-hours), how long the pumping water level must be maintained in a "steady state" at a constant discharge rate (4-hours), and minimum requirements for water level recovery to determine the wells discharge rate (water level recovery to within 2 feet or 95 percent of pre-pumping water level within a length of time not exceeding the duration of the pumping test).

The BAVC well was tested in accordance with the procedures in Title 22, §64554, (f). The well was test pumped at a constant rate of 15 gallons per minute (gpm) (the amount required to meet the demands of the planned BAVC center) for a period of 72-hours. Water level measurements were collected every minute using a pressure transducer installed in well except during the first hour of the test due issues with transducer placement. The pumping water level in the well was relatively constant after approximately 7 hours of pumping and was in a steady state condition for the remaining 65-hours of pumping (**Figure 4**).

After pump shut off, the water level within the well recovered to 96 percent of the pre-pumping water level in 7.7 hours. Based on the results of the pump testing data, the discharge rate of the BAVC Well was 15 gpm.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

Scott Lewis, PG
Principal Geologist

Figures
Figure 1 – BAVC Well Location Map
Figure 2 – National Flood Hazard Layer FIRMette Map
Figure 3 – BAVC Well As-Built Profile
Figure 4 – BAVC Pump Test Hydrograph

Attachments
Attachment 1 – DDW Minimum Horizontal Distance Checklist
Attachment 2 – BAVC Preliminary DWSAP

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES
DIVISION OF DRINKING WATER

MINIMUM HORIZONTAL DISTANCE:

System Name:_____ **System No.:**_____
Well Name:_____
Source of information:_____
Date collected:_____

1. SEWERAGE FACILITIES	MINIMUM FEET	ACTUAL FEET
a. Sanitary Sewer and House Laterals	50	
b. Sewer Manhole	100	
c. Sewage Pumping Station	100	
d. Sewage Treatment Plant	150	
e. Sewage Lagoons	500	
f. Lined Effluent Discharge Channel	200	
g. Sewage Irrigation Areas	500[2]	
h. Sewage Spreading Areas	500	
i. Sewage Percolation/Evaporation Ponds	500	
j. Watertight Septic Tank	100	
k. Horizontal Leach Lines	100	
l. Seepage Pit and Cesspool	150[1]	
m. Pit Privy	50	
n. Vault Privy (Pumpout)	50	
o. Storm Sewers	50	
p. Drainage Channel	50	
g. Flood Plan (100-year flood)	Above high water line	
2. INDUSTRIAL FACILITIES		
a. Barnyard, feedlot, stable and pasture areas	100	
b. Industrial waste sewers, holding tanks, ponds and storage areas	*	
c. Petroleum storage tanks (sub-surface)	100[3]	
d. Petroleum transmission mains	500[3]	
3. SOLID WASTE DISPOSAL SITE		
Class 1	*	
Class 2	2,000	
Class 3	500	
4. OTHER		
a. Dwelling	25	
b. Pond, Lake, Stream	50-100	
c. Abandoned Conduit	50	
d. Cathodic Protection Well:		
- Cased	50	
- No casing	200	
g. Abandoned & Destroyed Wells per DWR Bulletin 74	None required	
Remarks & Defects:	* Facilities must be identified & evaluated on a case by case basis	

1. Bottom of pit shall be more than 10 feet above groundwater level.
2. The sewage-irrigated area from the well shall be plainly marked preferably by a fence.
3. Underground storage and transmission facilities shall be pressure tested annually.

Attachment 1

Luhdorff & Scalmanini
Consulting Engineers

BAVC Well No. 1 - Site Map

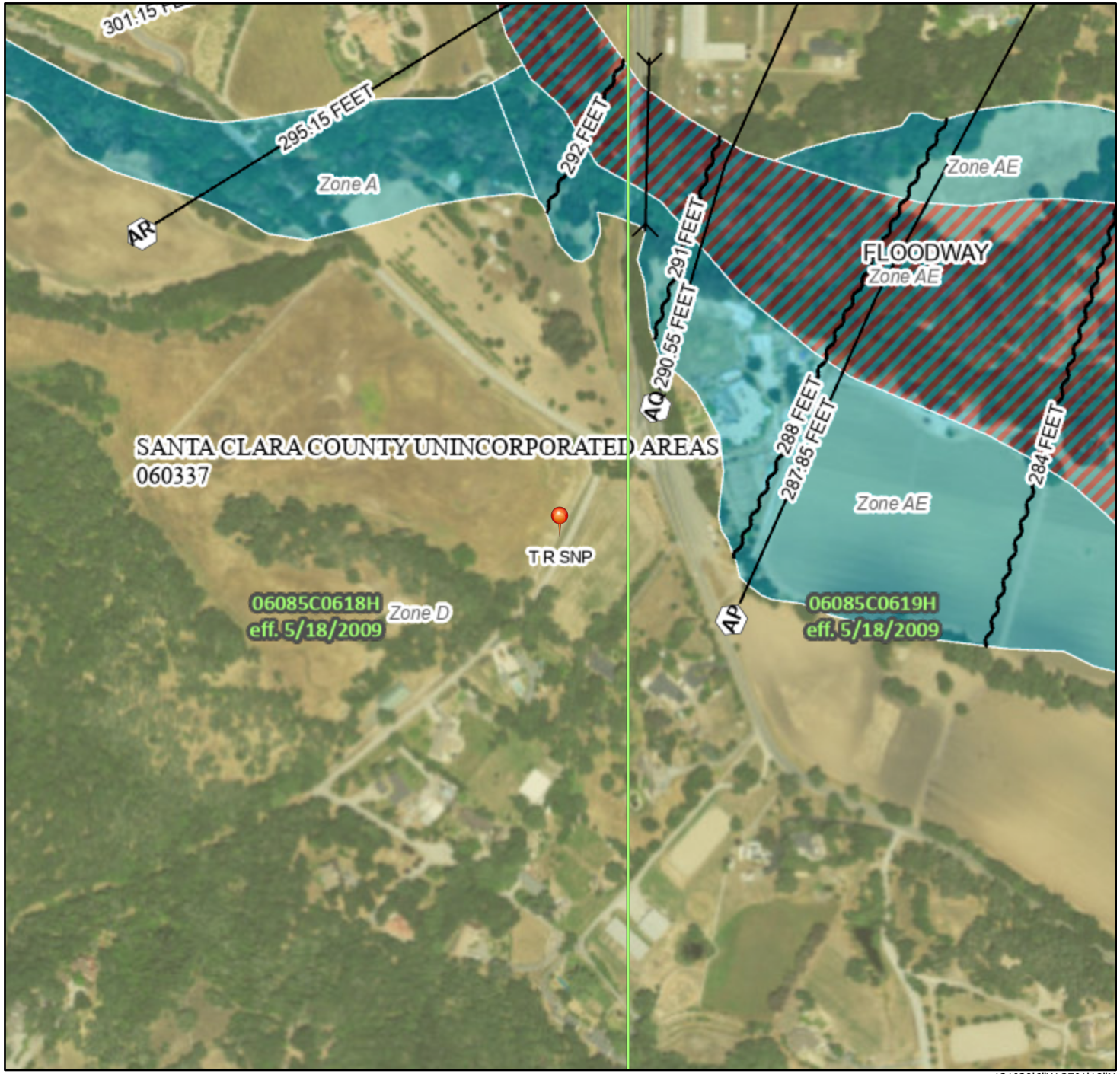
Vipassana Center Water System
Gilroy, CA

Figure 1

National Flood Hazard Layer FIRMette

FEMA

121°39'44"W 37°1'46"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

121°39'6"W 37°1'18"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/31/2022 at 5:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Figure 2

Client: Bay Area Vipassana Center	**Lat/Long:** 37.025742/-121.656972
Project Name: BAVC Water System	**Well Name:** BAVC Well
LSCE #: 22-2-006	**Drill Date:** 5/24/2022 - 5/27/2022
Location: Gilroy, CA	**Drilling Method:** Air & Mud Rotary
Geologist: B. Kearney	**Driller:** Guardino Well Drilling Inc.

Luhdorff & Scalmanini
Consulting Engineers

Depth (ft bgs)	Lithologic Description	Strat-Column	As-Built Well Profile

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160

Gravelly Clay - low plasticity, dark brown, small gravel, little sand

Sandy Gravel - small to large gravel, sub-angular to sub-rounded, fine to very coarse sand, quartz rich, some chips of poorly indurated orange sandstone

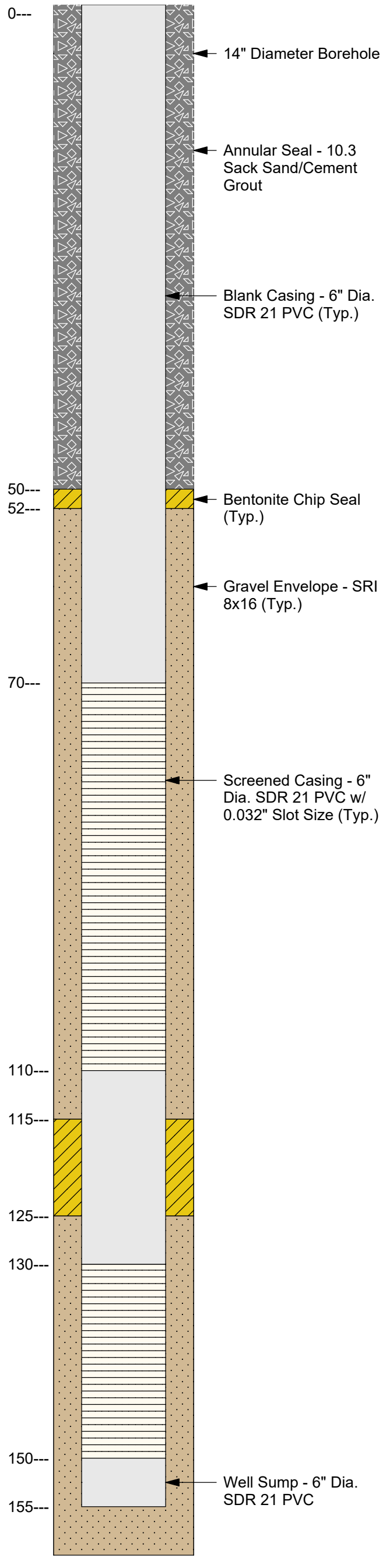
Clay - non-plastic grey mudstone

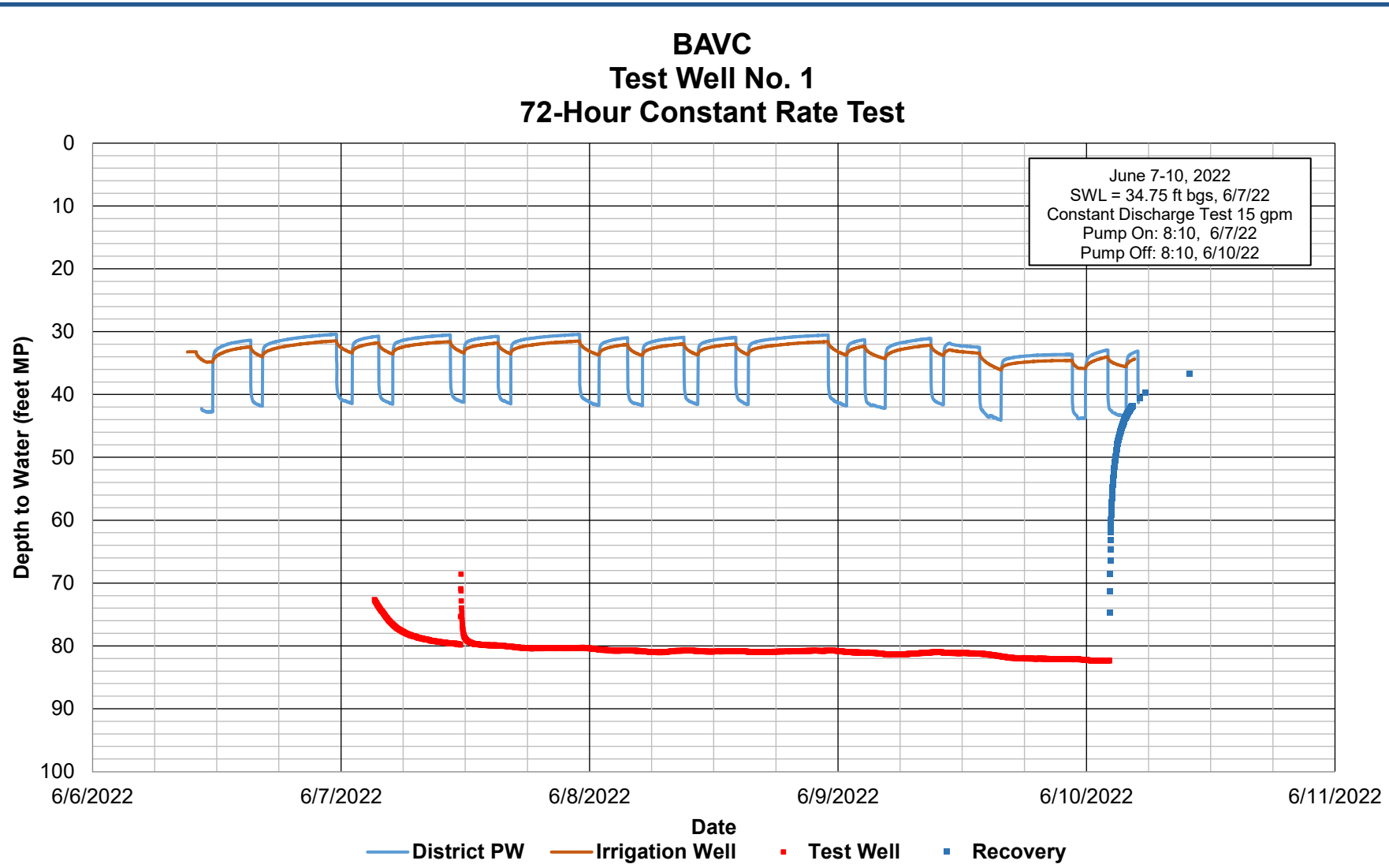
Sand - fine to very coarse orange sand, quartz rich, some chips of poorly indurated orange sandstone

Sand - fine to coarse, grey, poorly indurated sandstone

Sand - coarse to very coarse, quartz rich

Sand - very fine to medium, pale grey, poorly indurated sandstone





Luhdorff & Scalmanini
Consulting Engineers

BAVC - Pump Test Hydrograph

Bay Area Vipassana Center Water System
Gilroy, CA

Figure 4

Bay Area Vipassana Center (BAVC)
Well No. 1
APN: 756-30-024

Santa Clara Water District/Bay Area Vipassana Center Water System
Gilroy, CA – Santa Clara County

BAY AREA VIPASSANA CENTER

DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM

PREPARED BY
LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS, INC.

JULY 2022

EXECUTIVE SUMMARY

The Drinking Water Source Assessment and Protection (DWSAP) Program is a federal and state mandated program to assess the vulnerability of the drinking water supply to contamination. California's DWSAP was approved by the United States Environmental Protection Agency (EPA) in November 1999 as satisfying source protection under a 1996 amendment to the federal Safe Drinking Water Act. California's program is regulated by the Division of Drinking Water and Environmental Management, Department of Public Health (DPH).

The DWSAP program for groundwater sources (wells) requires California drinking water purveyors to assess local hydrogeologic conditions, well construction and production, and land use in the vicinity of water supply wells. These factors are used to delineate Groundwater Protection Zones for each well, which represent geographic areas from which groundwater may be extracted by the well in two, five and ten years of pumping. Within the protection zones, Possible Contaminating Activities (PCAs) are identified and ranked according to the potential to contaminate the water supply well. PCAs include known contaminant plumes, leaking underground storage tanks, dry cleaners, gas stations, etc. The well construction features and hydrogeology are considered in determining the Physical Barrier Effectiveness (PBE), which indicates how effective the well design may be in preventing potential contamination in groundwater from entering the well.

The DWSAP results can be used as a planning tool for land use in the vicinity of water sources. The DWSAP should be updated every five years, or whenever existing water supply wells are modified or rehabilitated, or when new wells are put into service.

WATER SYSTEM NAME

The Bay Area Vipassana Center (BAVC) Water System will provide water to the Bay Area Vipassana Center. The BAVC Water System will operate one 6-inch diameter well that will provide 100% of the Center's potable water supply.

PROPOSED NEW WELL SOURCE

This DWSAP report analyzes the BAVC Well No. 1. The well was constructed in May 2022 for the Bay Area Vipassana Center. The well was designed based on the analysis of lithologic samples from the borehole.

DWSAP METHODOLOGY

To prepare this DWSAP on behalf of the Bay Area Vipassana Center, Luhdorff and Scalmanini, Consulting Engineers Inc. (LSCE) reviewed local well construction details, pump/discharge records, and local hydrogeologic data and reports, and constructed a Test Well to identify potential water-bearing zones and analyze water quality for the proposed water supply well. LSCE also reviewed local, state, and federal agency database files along with an Environmental Data Resources (EDR) report assessing potential existing contamination sites. Based on these sources, the Groundwater Protection Zones, Physical Barrier Effectiveness, Possible Contaminating Activities, and Vulnerability Rankings were determined according to the following methodologies:

Groundwater Protection Zones

Groundwater Protection Zones are concentric zones that represent the overlying areas where groundwater may be drawn into the well during two, five, and ten years of pumping. The size of each protection zone is determined from the estimated annual extraction rate of the well, the effective porosity of the formation within which the well is completed, the period of pumping (two, five and ten years), and the screened interval of the well.

For the subject BAVC Well No. 1, the pumping rate of the well for calculating the protection zones was based on the planned operation of the well as contemplated by Bay Area Vipassana Center. The Modified Calculated Fixed Radius Delineation method was used, and the direction of groundwater flow was determined based on a contour map of equal groundwater elevations. Each Groundwater Protection Zone is assigned a point value for the purpose of vulnerability ranking: the two-year zone (Zone A) is assigned five points, the five-year zone (Zone B5) is assigned three points, and the ten-year zone (Zone B10) is assigned one point. DPH requires a minimum radius for each protection zone: 600 feet for Zone A, 1,000 feet for Zone B5, and 1,500 feet for Zone B10. If the calculated radii of the protection zones are less than the DPH minimums, the minimum values are used instead.

Physical Barrier Effectiveness

After the Groundwater Protection Zones are established, the local hydrogeology and construction features of the well are evaluated to determine how effective the well completion may be in preventing potential contamination in groundwater from entering the well. The factors evaluated include aquifer confinement, sanitary seal depth, proximity to improperly abandoned or destroyed wells, and static water level conditions. Each component of this Physical Barrier Effectiveness (PBE) survey is given a point value, with more points associated with factors that more effectively protect the well from contamination. The PBE of the well is then characterized according to the resultant point score: *Low* (0 to 35 points), *Moderate* (36-69 points), or *High* (70-100 points). Wells in **unconfined** aquifers can score a maximum of 70 PBE points, and wells completed in **confined** aquifers can score a maximum of 100 PBE points.

Possible Contaminating Activities Inventory and Vulnerability Ranking

Within each Groundwater Protection Zone, Possible Contaminating Activities (PCAs) are identified. The DPH provides a PCA Inventory and assigns each PCA a risk ranking to represent the potential for that PCA to contaminate groundwater: VH (Very High) = 7 points, H (High) = 5 points, M (Medium) = 3 points, or L (Low) = 1 point. For instance, the DPH ranks gas stations as VH and schools as L. Some PCAs have different risk rankings depending on which Groundwater Protection Zone they are located in. For example, sewer collection systems are ranked H in Zone A but only L in Zones B5 and B10.

A Vulnerability Score, ranging from 3 to 17, is calculated for each Possible Contaminating Activity:

	Possible Contaminating Activity Points (7, 5, 3, or 1)
	Groundwater Protection Zone Points (5, 3, or 1)
+	Physical Barrier Effectiveness Points (5, 3, or 1)
=	Vulnerability Score

All of the PCAs within the Groundwater Protection Zones are ranked by Vulnerability Score from highest to lowest; i.e., from the most likely to contaminate groundwater to the least likely. For example, for a well with a PBE of M, a gas station (VH) located in Zone B5 would have a Vulnerability Score of 13:

	PCA of VH	7 points
	Zone B5	3 points
+	PBE of M	3 points
=	Vulnerability Score	13 points

Only those PCAs with Vulnerability Scores of nine and higher (>9) are included in the Vulnerability Ranking. Water supply wells are considered by DPH to be vulnerable to those PCAs with a score of nine or higher, and most vulnerable to those PCAs associated with groundwater contamination.

DWSAP RESULTS

Groundwater Protection Zones

As described above, Groundwater Protection Zones are calculated for a supply well based on estimated pumping capacity, well screen interval, assumed porosity of the aquifer, and the approximate direction of groundwater flow. The DWSAP methodology requires that Groundwater Protection Zones be delineated at distances that approximate the two-, five-, and ten-year travel times for groundwater to reach the well. The BAVC Well No. 1 was assigned the DPH minimum values for groundwater protection zone radius based on a maximum flow rate of 15 gpm pumped continuously. The calculated protection zone radii (Zone A = 237 ft, Zone B5 = 374 ft, Zone B10 = 529 ft) were smaller than the DPH minimum zones so the minimum protection zone radii were used.

Well	Estimated Pumping Capacity (ft^3/yr)	Well Screen Interval (ft)	Default Porosity (Fraction)	Approximate Groundwater Direction (Degrees)
BAVC Well No. 1	1,054,005	60	0.2	

Well	Zone A (2-Year TT) Radius (ft)	Zone B5 (5-Year TT) Radius (ft)	Zone B10 (10-year TT) Radius (ft)
BAVC Well No. 1	600	1,000	1,500

Note: TT = Travel Time

Physical Barrier Effectiveness

Based on the hydrogeologic setting, the well is constructed within an unconfined aquifer, which results in the well potentially receiving up to 70 PBE points. Points can be deducted from this maximum for various reasons, including the lack of a surface seal or site security. The PBE points for the proposed well are listed below:

Well	Seal Depth (ft)	Total PBE points	PBE Ranking
BAVC Well No. 1	50	62	Moderate

A profile of the well showing seal depth and other construction features is included with this DWSAP, for reference.

Possible Contaminating Activities Inventory and Vulnerability Ranking

There has not been groundwater contamination or evidence of saltwater intrusion detected in groundwater near the proposed source. The PCAs for which the well has the greatest vulnerability are listed below:

Well	Zone	Activity	Vulnerability Score
BAVC Well No. 1	A	Wells – Agricultural/ Irrigation	11
	A	Wells – Water Supply	11
	A	Transportation Corridors – Roads/Streets	11
	A	Wells – Monitoring/Test Holes	11
	B5	Transportation Corridors – Roads/Streets	9

WATER QUALITY

The groundwater source is reported to be recharged through natural recharge from streams, principally Uvas and Llagas Creeks; percolation of precipitation and surplus irrigation waters; seepage along canals; subsurface inflow; and artificial recharge facilities including the Madrone Channel and Main Ave Percolation Ponds. Preliminary screening of Title 22 drinking water quality constituents indicate that groundwater produced from the subject BAVC Well No. 1 will meet all primary and secondary drinking water standards under DPH regulations except for Manganese. Maximum Contaminant Level (MCL) for Manganese is 50 µg/L. Test results for selected general mineral, general physical, and metals are presented below:

Date	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	Total Alk. (mg/L)	Cl (mg/L)	SO_4 (mg/L)	NO_3 as N (mg/L)	Sp. Cond. (EC) (µmhos/cm)	Tot. Diss. Solids (mg/L)	Hardness as $CaCO_3$ (mg/L)	Fe (µg/L)	Mn (µg/L)	pH
7/18/22	45	27	39	1.7	200	44	49	ND	610	390	230	ND	**190**	6.9

CONCLUSIONS

Results of the DWSAP indicate that the subject BAVC Well No. 1 would be most vulnerable to activities that are not known to have contaminated soil or groundwater but have the potential to do so. The groundwater pumped from the water supply well is not considered vulnerable to any existing contaminant plumes. The potential contaminating activities are as follows:

Potential Soil or Groundwater Contaminating Activities

- Wells – Agricultural/Irrigation
- Wells – Water Supply
- Wells – Monitoring/Test Holes
- Transportation Corridors – Roads/Streets

The vulnerability rankings calculated for the BAVC Water System's Well No. 1 are reflective of the Possible Contaminating Activities typically found in Residential and Agricultural/Rural settings. The Physical Barrier Effectiveness ranking for the well is "M", or "Moderate".

REFERENCES

California Department of Water Resources, California's Groundwater Bulletin 118. 2004. *Basin Boundary Description - Central Coast Hydrologic Region, Gilroy-Hollister Groundwater Basin, Llagas Subbasin*. Accessed July 2022.

Environmental Data Resources. 2022. *EDR Radius Map Report with GeoCheck.* Prepared for Luhdorff & Scalmanini Consulting Engineers on July 14, 2022.

Drinking Water Source Assessment

Water System

Bay Area Vipassana Center

Santa Clara County

Water Source

BAVC Well No. 1

Assessment Date

July 2022

California State Water Resources Control Board
Division of Drinking Water
DHS Santa Clara District

District No.	17
System No.	**TBD**
Source No.	
PS Code	**TBD**

Checklist for Drinking Water Source Assessment - Ground Water Source

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. _____ PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

The following information should be contained in the drinking water source assessment submittal.

__X__ Cover Page

__X__ Checklist *(this form)*

__X__ Assessment Summary

__X__ Vulnerability Summary

__X__ Source Location Form *(not currently available, contact DHS for information)*

__X__ Delineation of groundwater protection zones

__X__ Source Data Sheet (select appropriate form)

- __X__ Well Data Sheet
- _____ Spring Data Sheet
- _____ Horizontal Well Data Sheet

__X__ Physical Barrier Effectiveness Checklist

__X__ Possible Contaminating Activities (PCA) inventory form

__X__ Vulnerability Ranking

__X__ Assessment map with source location and protection zone

_____ Additional maps (optional) (e.g. local maps of zones and PCAs, recharge area maps, or maps indicating direction of ground water flow)

__X__ Means of Public Availability of Report (indicate those that will be used)

- __X__ Notice in the Consumer Confidence Report* (minimum)
- __X__ Copy in regulatory agency (DHS or LPA) office (minimum)
- __X__ Copy in public water system office (recommended)
- _____ Copy in public library/libraries
- _____ Internet (indicate Internet address: _____)
- _____ Other (describe)

*The CCR should indicate where customers can review the assessments.

Assessment Summary

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

Description of System and Source

The Bay Area Vipassana Center (BAVC) water system is located in Santa Clara County and serves the Bay Area Vipassana Center. There is one service connection serving one customer.

The drinking water source for the BAVC water system is the Gilroy-Hollister Valley Groundwater Basin, Llagas Area Subbasin. The Llagas subbasin is confined by the Diablo Range on the east, the Santa Cruz Mountains on the west, the groundwater divide at Cochran Road near the town of Morgan Hill to the north, and the Pájaro River in the south. The water bearing formations of the Llagas subbasin include Pliocene to Holocene age continental deposits of unconsolidated to semi-consolidated gravel, sand, silt and clay. These include the Santa Clara Formation and the valley fill materials (alluvial and alluvial fan deposits) which constitute the principal water producing formations. The surface area for the subbasin is approximately 87 square miles or 56,000 acres. Recharge to the Llagas subbasin occurs from a variety of sources: natural recharge from streams, principally Uvas and Llagas Creeks; percolation of precipitation and surplus irrigation waters; seepage along canals; subsurface inflow; and artificial recharge facilities including the Madrone Channel and Main Ave Percolation Ponds. General land use is residential, agricultural, and undeveloped.

Assessment Procedures

The assessment of the source BAVC Well No. 1 was conducted by Luhdorff and Scalmanini Consulting Engineers (LSCE) in July 2022. The following sources of information were used in the assessment: CA Water Boards files, DWR files, Environmental Data Resources (EDR) report, previous hydrogeological studies, LSCE files and records, site plans/drawings, and aerial photos.

Procedures used to conduct the assessment include: file review, calculations, field review, map review, use of GIS, and review of state well and water records.

Contents of this Assessment

Yes	**X**	**No**	☐	**Assessment Summary**
Yes	**X**	**No**	☐	**Vulnerability Summary**
Yes	**X**	**No**	☐	**Source Location Form**
Yes	**X**	**No**	☐	**Delineation of Protection Zones**
Yes	**X**	**No**	☐	**Physical Barrier Effectiveness Checklist**
Yes	**X**	**No**	☐	**Source Data Sheet**
Yes	**X**	**No**	☐	**Inventory of Possible Contaminating Activities**
Yes	**X**	**No**	☐	**Vulnerability Ranking**
Yes	**X**	**No**	☐	**Assessment Map**

Vulnerability Summary

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. _____ PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT

A source water assessment was conducted for the BAVC Well No. 1 of the Bay Area Vipassana Center water system in July 2022.

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

N/A

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Wells – Agricultural/Irrigation
Wells – Water Supply
Wells – Monitoring/Test Holes
Transportation Corridors – Roads/Streets

Discussion of Vulnerability

The BAVC Well No. 1 will serve the Bay Area Vipassana Center in Gilroy, CA. The well was constructed using current well standards and a has a sanitary seal to a minimum depth of 50 feet bgs, to reduce the chance of introducing contaminants to the aquifer at the wellhead. Current residential and agricultural/rural use could potentially cause contamination to the groundwater. The source may also be vulnerable to activities not known to have contaminated the groundwater that are located near the drinking water source as identified in this DWSAP. In addition, the coarse-grained water bearing strata in the formation are overlain by fine grained sediments. These shallow fine-grained clay layers help confine the aquifer, naturally slowing transport of surface waters down to the stratigraphic intervals screened with well casing.

Appendix H

Drinking Water Source Location – Ground Water

Public Water System: Bay Area Vipassana Center ID No.: TBD____

Name of source: BAVC Well No. 1 ID No.:_____

Location date: 2022__ Source located by (name of person): Scott Lewis__

Method of determining location:

_____ USGS quad map (7.5 minute series, 1:24,000 scale), hand calculated

_____ USGS quad map (7.5 minute series, 1:24,000 scale), computer calculated

_____ Global Positioning System (GPS)

Unit (manufacturer/model):

Accuracy of GPS unit (+/- ____ ft.)

__X__ Other Method: Mapping Software

Accuracy of GPS unit (+/- 120__ ft.)

Location of well (decimal degrees): Latitude: N 37.025742 º

Longitude: W -121.656972 º

Physical description of location [Pertinent landmarks, address, or approximate address (cross streets, etc.)]: APN: 756-30-024

Approximately 200 feet southwest of the intersection of El Matador Drive and Redwood Retreat Road; Gilroy, CA 95020

General description of recharge area, if known:

Recharge to the aquifer is through natural recharge from streams, principally Uvas and Llagas Creeks; percolation of precipitation and surplus irrigation waters; seepage along canals; subsurface inflow; and artificial recharge facilities including the Madrone Channel and Main Ave Percolation Ponds.

WELL DATA SHEET

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Bay Area Vipassana Center	*Planned*
System Number	TBD	*Planned*
Source of Information *(well log, DHS/County files, system, etc)*	DWR Files	Actual
Organization Collecting Information *(DHS, County, System, other)*	LSCE	Actual
Date Information Collected/Updated	July, 2022	Actual
WELL IDENTIFICATION		
* Well Number or Name	BAVC Well No. 1	Proposed
* DHS Source Identification Number (**FRDS ID No.**)		
DWR Well Log on File? ("YES" or "NO")	Yes	Actual
State Well Number (from DWR)	TBD	
Well Status (Active, Standby, Inactive)	Proposed	Actual
WELL LOCATION		
Latitude	37.025742	Estimated
Longitude	-121.656972	Estimated
Ground Surface Elevation (ft above Mean Sea Level)	306	Estimated
Street Address	9201 El Matador Dr.	Actual
Nearest Cross Street	Redwood Retreat Rd.	Actual
City	Gilroy	Actual
County	Santa Clara	Actual
* Neighborhood/Surrounding Area *(see Note 1)*	Ru	Actual
Site plan on file? ("YES" or "NO")	YES	Actual
DWR Ground Water Basin	Gilroy-Hollister Valley	from DWR
DWR Ground Water Sub-basin	Llagas Area	from DWR
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	> 50	Actual
Distance to Active Wells (ft)	>200	Actual
Distance to Abandoned Wells (ft)	> 50	Actual
Distance to Surface Water (ft)	> 100	Actual
** Size of controlled area around well (square feet)	> 100	Actual
* Type of access control to well site *(fencing, building, etc)*	Fencing	Design
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	YES	Design
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	TBD	
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	NO	Actual
* Drainage away from well? ("YES" or "NO")	YES	Actual
ENCLOSURE/HOUSING		
Enclosure Type *(building, vault, none, etc.)*	TBD	
Floor material		
Located in Pit? ("YES" or "NO")	NO	Actual
Pit depth (feet) (if applicable)		
WELL CONSTRUCTION		
Date drilled	5/24 - 5/27/2022	Actual
Drilling Method	Air & Mud Rotary	Actual
Depth of Bore Hole (feet below ground surface)	160	Actual
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	0-70; 110-130; 150-155	Actual
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.	6 (all casing)	Actual
Casing Material; 2nd Casing Material; 3rd Casing, etc.	Sch. 40 PVC (all casing)	Actual

WELL DATA SHEET

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
Conductor casing used? ("YES", "NO" or "UNKNOWN") *(See Note 2)*	NO	Actual
Conductor casing removed? ("YES", "NO" or "UNKNOWN")		
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")	70	Actual
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	70-110; 130-150	Actual
* Total length of screened interval (ft) *(default = 10% pump capacity in gpm)* (or "UNKNOWN")	60	Actual
* Annular Seal?("YES", "NO" or "UNKNOWN") *(See Note 3)*	YES	Actual
* Depth of Annular Seal (ft)	50	Actual
Material of Annular Seal *(cement grout, bentonite, etc.)*	Sand/Cement Grout	Actual
Gravel pack, Depth to top (ft below ground surface)	52	Actual
Total length of gravel pack (ft)	108	Actual
AQUIFER		
* Aquifer Materials *(list all that apply: sand, silt, clay, gravel, rock, fractured rock)*	Clay, Gravel, Sand	Actual
* Effective porosity (decimal percent) *(default = 0.2)* (or "UNKNOWN")	0.2	Estimated
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	YES	Actual
Thickness of confining layer, if known (ft)	20	Estimated
Depth to confining layer, if known (ft below ground)	0-20	Actual
* Static water level (ft below ground surface)	32	Actual
Static water level measurement: Date/Method	5/27/2022; Sounder	Actual
Pumping water level (ft below ground surface)		
Pumping water level measurement: Date/Method		
WELL PRODUCTION		
Well Yield (gpm)	15	Actual
Well Yield Based On (i.e., pump test, etc.)	Well Development	Actual
Date measured	5/27/2022	Actual
Is the well metered? ("YES" or "NO")	NO	Actual
Production (gallons per year)	TBD	
Frequency of Use (hours/year)	TBD	
Typical pumping duration (hours/day)	TBD	
PUMP		
Make	TBD	
Type	TBD	
Size (hp)	TBD	
* Capacity (gpm)	TBD	
Depth to suction intake (ft below ground surface)	TBD	
Lubrication Type	TBD	
Type of Power: *(i.e., electric, diesel, etc.)*	TBD	
Auxiliary power available? ("YES" or "NO")	TBD	
Operation controlled by: *(i.e., level in tank, pressure, etc.)*	TBD	
Pump to Waste capability? ("YES" or "NO")	TBD	
Discharges to: *(i.e., distribution system, storage, etc.)*	TBD	
REMARKS AND DEFECTS (use additional sheets as necessary)		

WELL DATA SHEET

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
NOTES		
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other		
2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		
Please Note:		
The information on this Well Data Sheet is considered confidential. To allow the information to be included		
in the permit report, or made available subject to a public information act request, the waiver clause below has		
to to be signed and dated by the owner (public water system). In lieu of this signature, the WDS has to be		
retained in a confidential file, or the information shown in the shaded rows has to be "blacked out."		
I/We, *(Name)*_____, ***certify that I/We am/are the present owners of the well described on this well data sheet. I/We have reviewed the information presented on this well data sheet and I/We take no exception to having the information inlcuded in the Department of Health Services' Engineering Report. I/We understand that by including the well data sheet in the Engineering Report, it will be part of a public document that can be reviewed and copied subject to the public information act request.***		
	,	
_____ _____		
(Signature) (Date)		

Delineation of Ground Water Protection Zones

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. _____ PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

Indicate the method used to delineate the zones:

(For more information refer to the Drinking Water Source Assessment and Protection document)

__X__ Calculated Fixed Radius (Default) (Show calculations below)

_____ Modified Calculated Fixed Radius (Show calculations below and attach documentation for direction of ground water flow)

_____ More detailed methods
Type used (i.e., analytical methods, hydrogeologic mapping, modeling):

_____ Arbitrary Fixed Radius (For use only by or with permission of DHS—use minimum distances shown below)

Calculated Fixed Radius Equation

The equation for the calculated fixed radius (R) is $R_t = \sqrt{Q\,t / \pi\,\eta\,H}$

R_t = R_2, R_5, or R_{10} corresponding to t (Calculate R for each travel time)
Q = maximum pumping capacity of well
(ft^3/year = gpm * 70,267): 1,054,005
t = time of travel (years), 2, 5 and 10 years
π = 3.1416
η = effective porosity (decimal percent) (If unknown, assume 0.2):
0.2
H = screened interval of well (feet) (If unknown, assume 10% of Q gpm, 10 ft minimum):
60

Specific methods follow on next page

Calculated Fixed Radius Delineation Method (Default)

Using the equation presented above, calculate the size of zones for the appropriate aquifer setting of the source.

Porous Media Aquifer

Zone A (2 year TOT) R_2 = 237 ft, minimum = 600 ft —use larger: 600 ft
Zone B5 (5 year TOT) R_5 = 374 ft, minimum = 1,000 ft—use larger: 1,000 ft
Zone B10 (10 year TOT) R_{10} = 529 ft, minimum = 1,500 ft—use larger: 1,500 ft

Fractured Rock Aquifer

(Increase size of zones by 50%)

Zone A (2 year TOT) $1.5R_2$ = _____ft, minimum = 900 ft—use larger: _____ft
Zone B5 (5 year TOT) $1.5R_5$ = _____ft, minimum = 1,500 ft—use larger: _____ft
Zone B10 (10 year TOT) $1.5R_{10}$ = _____ft, minimum = 2,250 ft—use larger: _____ft

Modified Calculated Fixed Radius Delineation Method

In porous media aquifers, if the direction of ground water flow is known (see Section 6.2.3), the default zone circle may be shifted upgradient by $0.5R_t$. The upgradient and downgradient limits of the zone are determined below.

Zone A (2-year TOT)

upgradient distance = $1.5R_2$ = _____ft, minimum = 900 ft, use larger: _____ft
downgradient distance = $0.5R_2$ = _____ft, minimum = 300 ft, use larger: _____ft

Zone B5 (5-year TOT)

upgradient distance = $1.5R_5$ = _____ft, minimum = 1,500 ft, use larger: _____ft
downgradient distance = $0.5R_5$ = _____ft, minimum = 500 ft, use larger: _____ft

Zone B10 (10-year TOT)

upgradient distance = $1.5R_{10}$ = _____ft, minimum = 2,250 ft, use larger: _____ft
downgradient distance = $0.5R_{10}$ = _____ft, minimum = 750 ft, use larger: _____ft

Physical Barrier Effectiveness Checklist - Ground Water Source

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. _____ PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

Use the DHS Well Data Sheet (separate document) to complete the following form.

Directions:

1. Read through the form and collect the information needed to complete the form. (Hydrogeology, Soils, Presence of abandoned or improperly destroyed wells, Well construction and operation.)

2. Determine Parameter A, Type of Aquifer.
   - If the aquifer is confined, use the right-hand column, and evaluate only the parameters indicated for confined aquifers.
   - If the aquifer is unconfined, semi-confined, or the degree of confinement is unknown, or if the aquifer is fractured rock, use the left-hand column and evaluate only the parameters for unconfined aquifers.

3. For each parameter appropriate for the source, place a check in the box for the answer that most closely applies to that source. If more than one answer is possible, select the more conservative (i.e. lower points) answer. *[For example, if the depth to static water (Parameter D) has varied between 45 and 55 feet, choose answer 2 (20 to 50 feet).]*

4. Add the points in the column appropriate for the source and interpret the score as shown on the bottom of the last page.
   - Determine whether the source has a High, Moderate or Low Physical Barrier Effectiveness. Use this in the Vulnerability analysis. The higher the points, generally the more effective the source and site are to retarding the movement of contaminants to the water supply.

NOTE: If the source is located in fractured rock the source is considered to have a Low Physical Barrier Effectiveness, regardless of the point total. So, if Parameter B, Aquifer Material is 3, the remainder of the form does not need to be completed.

Physical Barrier Effectiveness (PBE) – Ground Water, page 1 of 2
Source Name: BAVC Well No. 1 Source No.: TBD

PARAMETER	*POINTS*			
	Unconfined		Confined	
A. TYPE OF AQUIFER Confinement *(up to **50** points maximum)* choose one				
a. Unconfined, Semi-confined, Fractured Rock, Unknown	0	X		
b. Confined			50	
B. AQUIFER MATERIAL (Unconfined Aquifer) Type of materials within the aquifer *(up to **20** points maximum)* choose one				
1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A	20	X		
2. Porous Media (Interbedded sands, silts, clays, and gravels)	10			
3. Fractured rock * (* Low Physical Barrier Effectiveness - no further questions required)	0			
C. PATHWAYS OF CONTAMINATION (All Aquifers) Presence of Abandoned or Improperly Destroyed Wells *(up to **10** points maximum)*				
1. Are they present within Zone A (2-year time of travel (TOT) distance)?				
a. Yes or unknown	0		0	
b. No	5	X	5	
2. Are they present within Zone B5 (2- to 5-year TOT distance)?				
a. Yes or unknown	0		0	
b. No	3	X	3	
3. Are they present within Zone B10 (5- to 10-year TOT distance)?				
a. Yes or unknown	0		0	
b. No	2	X	2	
D. STATIC WATER CONDITIONS (Unconfined Aquifer) Depth to static Water (DTW) = 46 feet *(up to **10** points maximum)* choose one				
1. 0 to 20 feet	0			
2. 20 to 50 feet	2	X		
3. 50 to 100 feet	6			
4. > 100 feet	10			
E. WELL OPERATION (Unconfined Aquifer) Depth to Uppermost Perforations (DUP) DUP = 70 feet Maximum Pumping Rate of Well (Q) Q = 15 gallons/minute Length of screened interval (H) H = 60 feet [(DUP – DTW) / (Q/H)] = *(up to **10** points maximum)* choose one				
1. < 5	0			
2. 5 to 10	5			
3. > 10	10	X		

Physical Barrier Effectiveness – Ground Water, page 2 of 2
Source Name: BAVC Well No. 1 Source No. TBD

PARAMETER	*POINTS*			
	Unconfined		Confined	
F. HYDRAULIC HEAD (Confined Aquifer) What is the relationship in hydraulic head between the confined aquifer and the overlying unconfined aquifer? (i.e. does the well flow under artesian conditions?) *(up to **20** points maximum)* choose one				
1. head in confined aquifer is higher than head in unconfined aquifer under all conditions			20	
2. head in confined aquifer is higher than head in unconfined aquifer under static conditions			10	
3. head in confined aquifer is lower than or same as head in unconfined aquifer			0	
4. unknown			0	
G. WELL CONSTRUCTION (All Aquifers) 1. Sanitary Seal (Annular Seal) Depth = _____ feet *(up to **10** points maximum)* choose one				
a. None or less than 20 feet deep	0		0	
b. 20 to 50 ft deep	6		10	
c. 50 ft or greater	10	X	10	
2. Surface seal (concrete cap) *(up to **4** points maximum)* choose one				
a. Not present or improperly constructed	0		0	
b. Watertight, slopes away from well, at least 2' laterally in all directions	4	X	4	
3. Flooding potential at well site *(up to **1** point maximum)* choose one				
a. Subject to localized flooding (i.e. in low area or unsealed pit or vault) or Within 100 year flood plain	0		0	
b. Not subject to flooding	1	X	1	
4. Security at well site *(up to **5** points maximum)* choose one				
a. Not secure	0		0	
b. Secure (i.e. housing, fencing, etc.)	5	X	5	
Maximum Points Possible	70		100	
POINT TOTAL FOR THIS SOURCE	**62**			

Physical Barrier Effectiveness SCORE INTERPRETATION

	Point Total		Effectiveness	
_____	**0 to 35**	=	**Low**	(includes all sources in Fractured Rock)
X	**36 to 69**	=	**Moderate**	
_____	**70 to 100**	=	**High**	

Possible Contaminating Activities (PCA) Inventory Form - Ground Water

District Name Santa Clara District No. 17 County Santa Clara
System Name Bay Area Vipassana Center System No. TBD
Source Name BAVC Well No. 1 Source No. _____ PS Code: TBD

Completed by Luhdorff & Scalmanini Consulting Engineers Date July 2022

Check the PCA tables that will be used for this drinking water source (assessment must include the "Other" checklist and at least one of the remaining three checklists):

Commercial/Industrial _____

Residential/Municipal X

Agricultural/Rural X

Other (required for all) X

Proceed to appropriate checklist or checklists. Indicate whether the PCA is located in the zone by placing a Y (yes), N (no), or U (unknown) in the appropriate boxes.
Example:

Zone A	Zone B5	Zone B10
Y	N	N
N	**Y**	**U**
U	N	N

Risk Ranking of PCAs, where VH = Very High Risk, H = High Risk, M = Moderate Risk, L = Low Risk

PCA Checklist COMMERCIAL/INDUSTRIAL

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Automobile- Body shops (H)				
Automobile- Car washes (M)				
Automobile- Gas stations (VH)				
Automobile- Repair shops (H)				
Boat services/repair/ refinishing (H)				
Chemical/petroleum pipelines (H)				
Chemical/petroleum processing/storage (VH)				
Dry cleaners (VH)				
Electrical/electronic manufacturing (H)				
Fleet/truck/bus terminals (H)				
Furniture repair/ manufacturing (H)				
Home manufacturing (H)				
Junk/scrap/salvage yards (H)				
Machine shops (H)				
Metal plating/ finishing/fabricating (VH)				
Photo processing/printing (H)				
Plastics/synthetics producers (VH)				
Research laboratories (H)				
Wood preserving/treating (H)				
Wood/pulp/paper processing and mills (H)				
Lumber processing and manufacturing (H)				
Sewer collection systems (H, if in Zone A, otherwise L)				
Parking lots/malls (>50 spaces) (M)				
Cement/concrete plants (M)				
Food processing (M)				
Funeral services/graveyards (M)				
Hardware/lumber/parts stores (M)				
Appliance/Electronic Repair (L)				
Office buildings/complexes (L)				
Rental Yards (L)				
RV/mini storage (L)				

PCA Checklist RESIDENTIAL/MUNICIPAL

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Airports - Maintenance/ fueling areas (VH)	N	N	N	
Landfills/dumps (VH)	N	N	N	
Railroad yards/ maintenance/ fueling areas (H)	N	N	N	
Septic systems - high density (>1/acre) (VH if in Zone A, otherwise M)	N	U	U	
Sewer collection systems (H, if in Zone A, otherwise L)	N	N	N	
Utility stations - maintenance areas (H)	N	N	N	
Wastewater treatment plants (VH in Zone A, otherwise H)	N	N	N	
Drinking water treatment plants (M)	N	N	N	
Golf courses (M)	N	N	N	
Housing - high density (>1 house/0.5 acres) (M)	N	N	N	
Motor pools (M)	N	N	N	
Parks (M)	N	N	N	
Waste transfer/recycling stations (M)	N	N	N	
Apartments and condominiums (L)	N	N	N	
Campgrounds/ Recreational areas (L)	N	N	N	
Fire stations (L)	N	N	N	
RV Parks (L)	M	N	N	
Schools (L)	N	N	N	
Hotels, Motels (L)	N	N	N	

PCA Checklist AGRICULTURAL/RURAL

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	N	N	N	
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N	
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	N	N	
Other Animal operations (H in Zone A, otherwise M)	N	N	N	
Farm chemical distributor/ application service (H)	N	N	N	
Farm machinery repair (H)	N	N	N	
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	N	U	U	
Lagoons / liquid wastes (H)	N	N	N	
Machine shops (H)	N	N	U	
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N	
Agricultural Drainage (H in Zone A, otherwise M)	N	N	N	
Wells - Agricultural/ Irrigation (H)	Y	U	U	
Managed Forests (M)	N	N	N	
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	N	N	N	
Fertilizer, Pesticide/ Herbicide Application (M)	N	N	N	
Sewage sludge/biosolids application (M)	N	N	N	
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N	

PCA Checklist OTHER ACTIVITIES

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
NPDES/WDR permitted discharges (H)	N	N	N	
Underground Injection of Commercial/Industrial Discharges (VH)	N	N	N	
Historic gas stations (VH)	N	N	N	
Historic waste dumps/ landfills (VH)	N	N	N	
Illegal activities/ unauthorized dumping (H)	N	N	N	
Injection wells/ dry wells/ sumps (VH)	N	N	N	
Known Contaminant Plumes (VH)	N	N	N	
Military installations (VH)	N	N	N	
Mining operations - Historic (VH)	N	N	N	
Mining operations - Active (VH)	N	N	N	
Mining - Sand/Gravel (H)	N	N	N	
Wells - Oil, Gas, Geothermal (H)	N	N	N	
Salt Water Intrusion (H)	N	N	N	
Recreational area - surface water source (H)	N	N	N	
Underground storage tanks - Confirmed leaking tanks (VH)	N	N	N	
Underground storage tanks - Decommissioned - inactive tanks (L)	N	N	N	
Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)	N	N	N	
Underground storage tanks - Not yet upgraded or registered tanks (H)	N	N	N	
Underground storage tanks - Upgraded and/or registered - active tanks (L)	N	N	N	
Above ground storage tanks (M)	N	N	N	
Wells - Water supply (M)	Y	N	Y	
Construction/demolition staging areas (M)	N	N	N	
Contractor or government agency equipment storage yards (M)	N	N	N	
Dredging (M)	N	N	N	
Transportation corridors - Freeways/state highways (M)	N	N	N	
Transportation corridors - Railroads (M)	N	N	N	
Transportation corridors - Historic railroad right-of-ways (M)	N	N	N	
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	N	N	N	
Transportation corridors - Roads/ Streets (L)	Y	Y	Y	
Hospitals (M)	N	N	N	
Storm Drain Discharge Points (M)	N	N	N	
Storm Water Detention Facilities (M)	N	N	N	

PCA Checklist OTHER ACTIVITIES (continued)

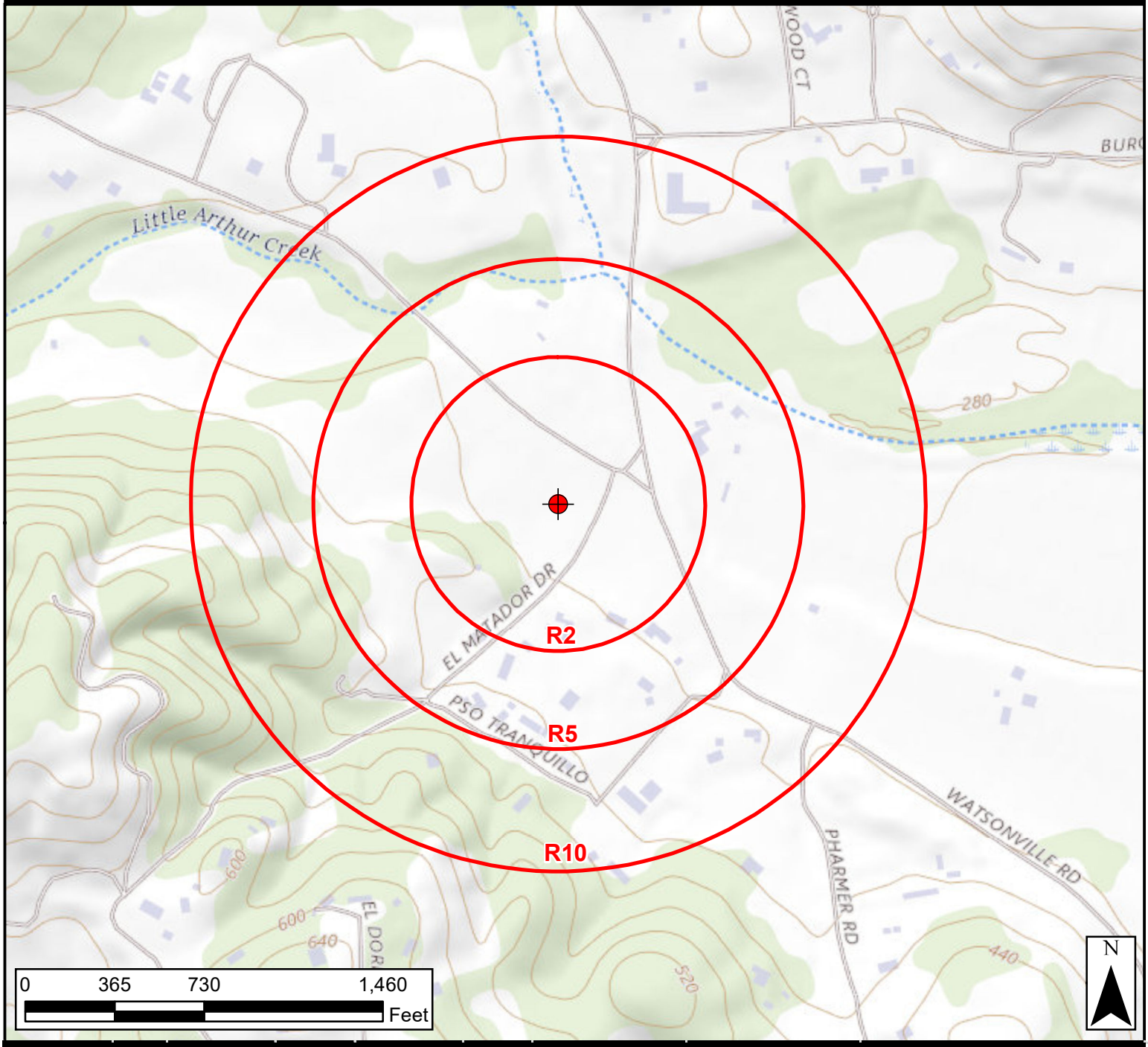
PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Artificial Recharge Projects - Injection wells (potable water) (L)	**N**	**N**	**N**	
Artificial Recharge Projects - Injection wells (non-potable water) (M)	**N**	**N**	**N**	
Artificial Recharge Projects - Spreading Basins (potable water) (L)	**N**	**N**	**N**	
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	**N**	**N**	**N**	
Medical/dental offices/clinics (L)	**N**	**N**	**N**	
Veterinary offices/clinics (L)	**N**	**N**	**N**	
Surface water - streams/ lakes/rivers (L)	**N**	**N**	**Y**	
Wells - monitoring, test holes (L)	**Y**	**N**	**Y**	

VULNERABILITY RANKING MASTER LIST - Ground Water

District Name: Santa Clara	District No. 17	County	Santa Clara
System Name: Bay Area Vipassana Center	System No. TBD		
Source Name: BAVC Well No. 1	Source No.	PS Code:	TBD

	PCA	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
		VH = 7	A = 5	L = 5	Risk + Zone + PBE points
		H = 5	B5 = 3	M = 3	
		M = 3	B10 = 1	H = 1	
Zone	PCA (Risk)	L = 1	Unknown = 0	VH = 0	
A	Wells - Agricultural/ Irrigation (H)	5	5	1	11
A	Wells – Water supply (M)	3	5	3	11
A	Transportation Corridors- Roads/ Streets (L)	1	5	5	11
A	Wells – monitoring, test holes (L)	1	5	5	11
B5	Transportation Corridors- Roads/ Streets (L)	1	3	5	9
B10	Wells – Water supply (M)	3	1	3	7
B10	Transportation Corridors- Roads/ Streets (L)	1	1	5	7
B10	Surface water - streams/ lakes/rivers (L)	1	1	5	7
B10	Wells – monitoring, test holes (L)	1	1	5	7
Unknown	Septic systems - high density (>1/acre) (VH if in Zone A, otherwise M)	3	0	3	6
Unknown	Septic systems – low density (<1/acre) (H in Zone A, otherwise L)	1	0	5	6
Unknown	Machine shops (H)	5	0	1	6
Unknown	Wells - Agricultural/ Irrigation (H)	5	0	1	6

DWSAP Ground Water Zone Interferface



Well Identification Information					
Well Number	**Longitude***	**Latitude***	**GPS'd**	* Well location coordinates have been rounded to 3 decimal places due to security concerns.	
NA	-121.657	37.026	Yes		
System Number	**System Name**	**Source Number**	**Source Name**	**District Number/Name**	**County Number/Name**
TBD	Bay Area Vipassana Center	N/A	BAVC Well No. 1	17/Santa Clara	43/Santa Clara

Well Zone Delineation Information					
Media Type	**System Type**	**Effective Porosity (n)**	**Screened Interval (h)**	**Pumping Capacity (q)**	**Azimuth of Flow (a)**
Porous Media	All Other System	0.2	60 ft	15 gpm	0- No Translation

Radii Measures			
Defaults Used	**R2**	**R5**	**R10**
Yes	600 ft	1000 ft	1500ft

Page Left Blank

Valley Water
Well Construction Application

Valley Water

5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL CONSTRUCTION APPLICATION

FC 158 (02-25-20)

TO BE COMPLETED BY VALLEY WATER

Valley Water Permit No.: C20220519001	Date Issued: 5/19/2022	Well Registration No.:
Geologic Setting: 4	Expiration Date: 5/19/023	Driller's Log No.:

TO BE COMPLETED BY OWNER AND DRILLER

Well Owner: Bay Area Vipassana Center	Property Owner: Bay Area Vipassana Center	Name of Business at Well Site: Bay Area Vipassana Center
Well Owner's Mailing Address: 530 Lawrence Expy., #365 City, State, Zip Sunnyvale, CA 94085	Property Owner's Mailing Address: 530 Lawrence Expy., #365 City, State, Zip Sunnyvale, CA 94085	**Address of Well Site**: 9201 El Matador Drive City, State, Zip Gilroy, CA 95020
Telephone No. & Contact Name: Sandeep Nayyar, 210-859-1305	Telephone No. & Contact Name: Sandeep Nayyar, 210-859-1305	Telephone No.: 210-859-1305

Owner's/Consultant's Well No.: | Assessor's Parcel No. of **Well Site**: Book 756 Page 30 Parcel 024

Consultant (Company): Luhdorff & Scalmanini Consulting Engineers	Drilling Company: Guardino Well Drilling, Inc.	
Address: 500 First Street City, State, Zip Woodland, CA 95695	Address: 4825 Croy Road City, State, Zip Morgan Hill, CA 95037	
Telephone No.: 530-661-0109	Telephone No.: 408-779-5904	C-57 License No.: C-57-664960
☐ Check if address or phone number has changed	☐ Check if address or phone number has changed	

THIS SECTION TO BE COMPLETED FOR ALL MONITORING WELLS OR EXTRACTION/RECOVERY WELLS

Case Name/No.: N/A	Caseworker Name: N/A
Oversight Agency: N/A	Caseworker Telephone No.: N/A

Signature of Responsible Professional | Date | Print Name (No substitution of signature will be accepted)

Civil Engineer Registration No. OR Geologist Registration No.

Estimated Depth of Completed Well: ☐ Less than 50 feet ☒ 50 to 300 feet ☐ Over 300 feet ☐ Other:

Well is to be constructed: ☐ In a public sidewalk ☐ In a public road ☐ On public property ☒ On private property ☐ On Valley Water property easement*
*See General Condition F, page 2.

WELL TYPE/USE	☐ WATER PRODUCTION	☐ MONITORING	☐ REMEDIATION	☐ DEWATERING	☐ HEAT EXCHANGE	☐ INJECTION	☐ CATHODIC PROTECTION	☒ OTHER
	☐ Agricultural ☐ Domestic ☐ Industrial ☐ Municipal	☐ GW Level ☐ GW Quality ☐ Inclinometer ☐ Vapor ☐ Other	☐ Air Sparge ☐ GW Extraction ☐ Material Emplacement ☐ Vapor Extraction ☐ Other	☐ Permanent ☐ Temporary	☐ Closed Loop ☐ Open Loop	☐ Groundwater Cleanup Reinjection ☐ Stormwater ☐ Water Supply Recharge ☐ Other		Test Well

Other wells exist on this property? ☒ Yes ☐ No If yes, status: ☒ Active ☐ Inactive ☐ Abandoned

SIGNATURES

I understand and agree that all work associated with this permit is required to be done in accordance with Santa Clara Valley Water District (Valley Water) Well Ordinance 90-1, the Valley Water Well Standards, and the conditions of this permit (see page 2). I certify that the information given in this permit is correct to the best of my knowledge and that the signature below, whether original, electronic, or photocopied, is authorized and valid, and is affixed with the intent to be enforceable. I also certify that a right of entry/encroachment agreement has been formalized between the well owner and property owner, if parties differ. I also understand that it is my responsibility, as the well owner, to notify Valley Water of any changes in the purpose of this well, from which, is indicated on this application.

Signature of Property Owner/Agent: Scott Lewis	Date: 5/18/22	Print Name of Property Owner/Agent: Scott Lewis
Signature of Well Owner/Agent:: Scott Lewis	Date: 5/18/22	Print Name of Well Owner/Agent: Scott Lewis
Signature of Well Driller/Agent: Scott Lewis	Date: 5/18/22	Print Name of Driller/Agent: Scott Lewis
Signature of Consultant/Agent: Scott Lewis P.G. 7876	Date: 5/18/22	Print Name of Consultant/Agent: Scott Lewis, PG 7876

IMPORTANT: A minimum 24-hour notice must be given to Valley Water's Well Ordinance Program prior to installing the annular seal. Please call the Well Ordinance Hotline at (408) 630-2660 to schedule an inspection. Please allow 10 working days to process permit

Valley Water
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL CONSTRUCTION APPLICATION

VALLEY WATER WELL PERMIT NO.: C20220519001

Based on information on this application and attachment(s) hereto (if any) and subject to approval noted below, permission is hereby granted to construct (drill) the described well. Permission to start work may be withheld until a field check verifies all statements made on application by permittee and is also subject to the "General" and "Special" Conditions stated below.

SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH APPROVAL (Water Supply Well Only)

NOTE: Department of Environmental Health approval must be granted before this application will be accepted by Valley Water.

Approved by: , R.E.H.S	☐ Approved as submitted ☐ Approved as corrected
	Date:

SITE PLAN

A 8½" x 11" paper site plan **must** be attached to this application, including:

1. Location of site features, including major buildings, landscaped areas, tank fields, existing wells, etc.
2. North arrow and scale
3. Location of proposed well with dimensions in feet from well to nearest cross streets.

GENERAL CONDITIONS

A. **The Valley Water's Well Ordinance Program** (408-630-2660) **must be notified a minimum of one working day before construction of the annular seal**. An authorized Valley Water representative must be on site to witness the construction of the annular seal. This requirement may be waived by an authorized Valley Water representative. If Valley Water waives the inspection requirement, Valley Water may request the permittee(s) to furnish certification, under penalty of perjury, that the well was constructed in accordance with Valley Water Well Standards and with the permit conditions.

B. Permittee agrees to construct, operate, and maintain the well according to provisions of the latest Valley Water Ordinance and the latest published revisions of Valley Water Well Standards to the end that this well will not cause pollution or contamination of groundwater or otherwise jeopardize the health, safety, or welfare of the people of Valley Water.

C. This permit is valid only for the purpose specified herein. Well construction methods authorized under this permit may not be changed except by written approval of an authorized Valley Water representative, and only if Valley Water believes that such a change will result in equal or superior compliance with Valley Water and State Well Standards (e.g., if Valley Water representative finds that site conditions warrant such a change).

D. This permit is only valid for the Assessor's Parcel No. indicated on it.

E. This permit may be voided if it contains incorrect information. If the permit is voided after work has begun, the well or boring that was constructed under this permit must be destroyed in accordance with Valley Water and State Well Standards.

F. If any work associated with this permit will take place on Valley Water property/easement, an encroachment or construction permit must be granted by Valley Water's Community Projects Review Unit (telephone 408-630-2650).

G. Before the well constructed under this permit can be used as a drinking water source, its use must be approved by the regulatory agency with authority over such use (typically the Santa Clara County Department of Environmental Health or the State of California Department of Public Health). A completed Well Inventory Form must also be approved.

H. If the well constructed under this permit cannot be or is not being used for its intended purpose, permittee is hereby required to destroy the well according to Valley Water Well Standards and under permit from Valley Water. Any test holes drilled under this permit must be destroyed within 24 hours of completion of testing activities. Destruction activities must be completed according to Valley Water standards. Valley Water must be notified a minimum of 24 hours prior to destruction.

I. Within 30 days of the completion of the well construction activities, the driller or consultant identified on this permit shall fully complete State of California DWR Form 188 and mail the original to Valley Water's Wells and Water Production Unit.

J. The permittee(s) shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend, and hold Valley Water, its officers, agents, and employees, free and harmless from any and all expense, cost, and liability in connection with or resulting from the granting or exercise of this permit including, but not limited to, property damage, personal injury, and wrongful death.

K. Permittees are required to be in full compliance with Cal/OSHA California Labor Code Section 6300.

L. A current C-57 Water Well Drilling Contractor's License is required for the construction of all wells.

M. Permittee, permittee's contractors, consultants, or agents shall be responsible to assure that all materials or waters generated during drilling, well construction, well development, pump testing, or other activities associated with this permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on- or off-site storm sewers, dry wells, or waterways. Such materials/waters must not be allowed to move off the property where the work is being completed.

N. The driller and consultants (if applicable) shall have an active copy of their Worker's Compensation Insurance on file with Valley Water.

O. This permit shall expire if not exercised within 180 calendar days of its approval, unless an extension of the permit expiration date is granted by an authorized Valley Water representative.

P. This permit must be kept on site during all activities associated with it and shall immediately be presented to an authorized Valley Water representative upon request.

Q. Permittee shall notify Underground Service Alert (USA) at 1-800-227-2600 or 811 prior to any digging.

SPECIAL CONDITIONS

Test well

Community Projects Review Unit Approval (if needed):	CPRU Permit No.:
Approved by:	Date: 5-19-22

Please allow 10 working days to process this application.

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118
(408) 265-2600

WELL INVENTORY FORM*

FC 1487 (07-16-15)

TO BE COMPLETED BY DISTRICT			
District Permit No.:	Date Issued:	Driller's Log No.:	Well Registration No.:

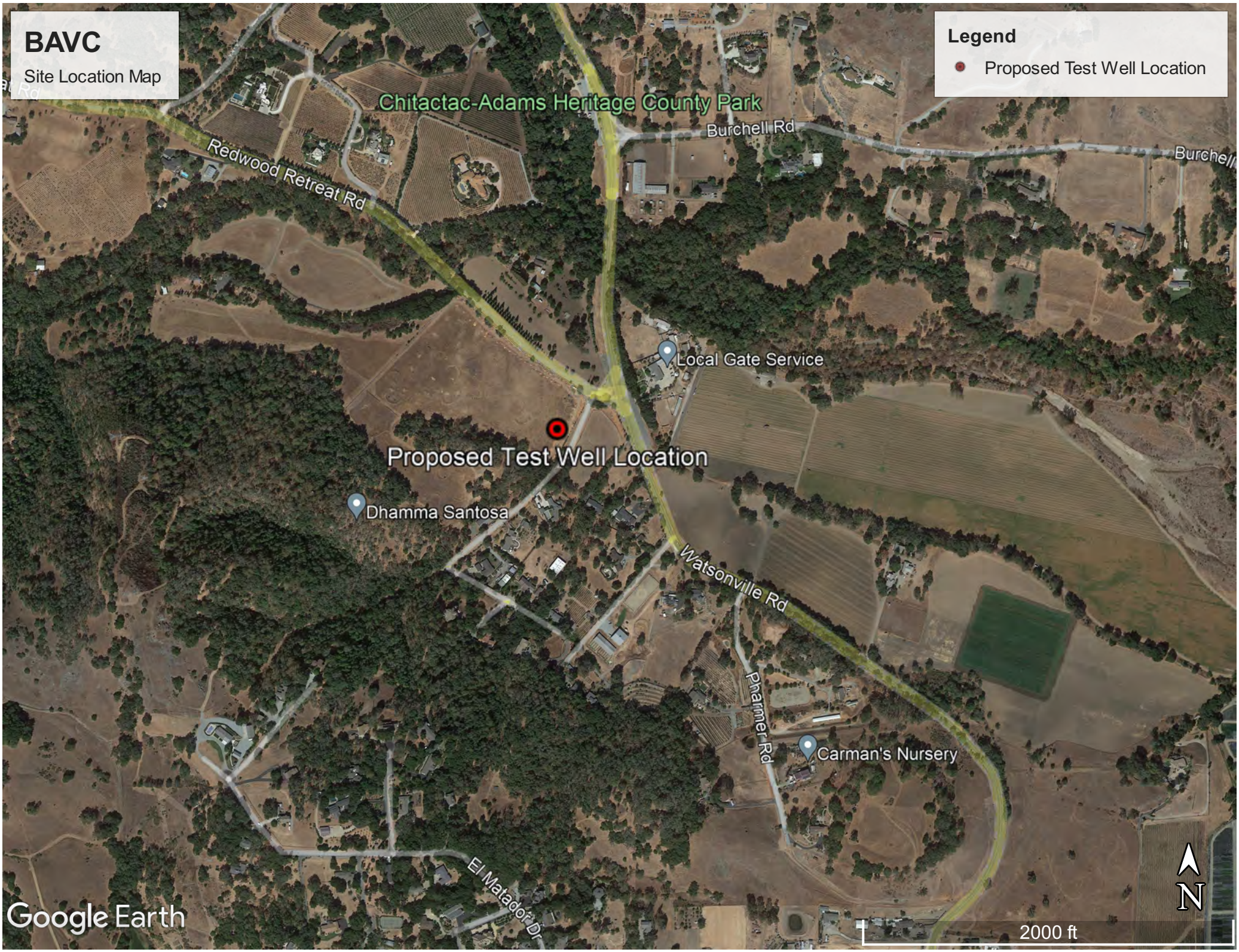
Well Owner: Bay Area Vipassana Center	Property Owner: Bay Area Vipassana Center	Name of Property at Well Site: Bay Area Vipassana Center
Well Owner's Mailing Address: 530 Lawrence Expy., #365	Property Owner's Mailing Address: 530 Lawrence Expy., #365	**Address of Well Site**: 9201 El Matador Drive
City, State, Zip: Sunnyvale, CA 94085	City, State, Zip: Sunnyvale, CA 94085	City, State, Zip: Gilroy, CA 95020
Telephone No.: 210-859-1305	Telephone No.: 210-859-1305	Assessor's Parcel No. of **Well Site**: Book 756 Page 30 Parcel 024

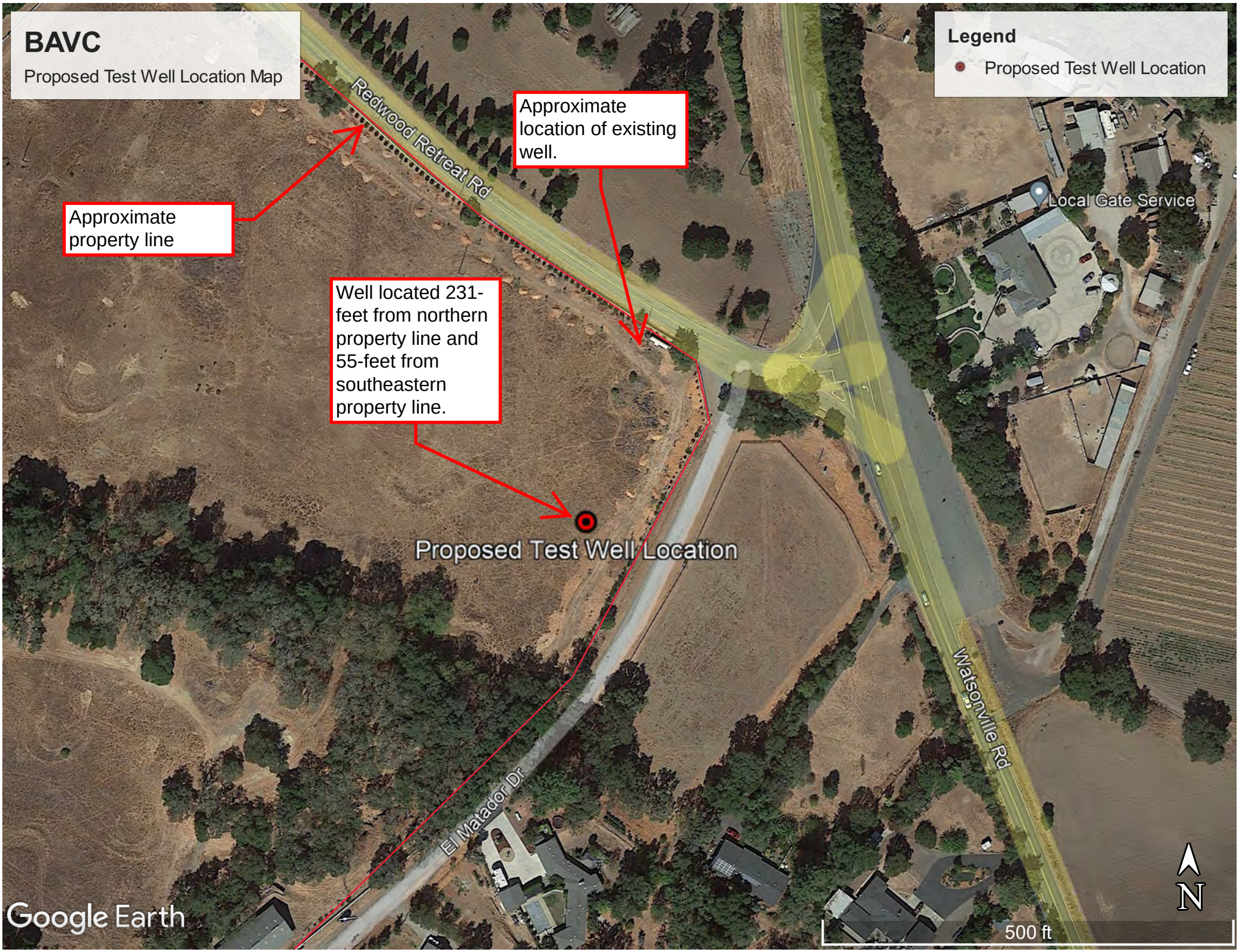
Do other wells exist on the property? ☒ Yes ☐ No How many wells total currently exist? 1

Reasons for installing new well: Test well to determine yield of alluvial materials above bedrock.

LIST ALL EXISTING WELLS AND THEIR STATUS, IF KNOWN	ENVIRONMENTAL HEALTH DEPT.
Well Registration No.: unknown / Owner's Well No.: Ag Well Permit No.: / Purpose of Well: Irrigation Status: ☒ Active ☐ Inactive / Depth: 94 / Casing: 7" Dia. Comments: Depth has been tagged to 94', Do you plan to use this well? ☒ Yes ☐ No Comments: Well is used to irrigate native trees along roadway only.	☐ Well in Good Condition ☒ Well in Use ☐ Abandoned ☐ Damaged ☐ Well on Standby ☐ Well Should Be Destroyed Comments:
Well Registration No.: / Owner's Well No.: Permit No.: / Purpose of Well: Status: ☐ Active ☐ Inactive / Depth: / Casing: Comments: Do you plan to use this well? ☐ Yes ☐ No Comments:	☐ Well in Good Condition ☐ Well in Use ☐ Abandoned ☐ Damaged ☐ Well on Standby ☐ Well Should Be Destroyed Comments:
Well Registration No.: / Owner's Well No.: Permit No.: / Purpose of Well: Status: ☐ Active ☐ Inactive / Depth: / Casing: Comments: Do you plan to use this well? ☐ Yes ☐ No Comments:	☐ Well in Good Condition ☐ Well in Use ☐ Abandoned ☐ Damaged ☐ Well on Standby ☐ Well Should Be Destroyed Comments:
Well Registration No.: / Owner's Well No.: Permit No.: / Purpose of Well: Status: ☐ Active ☐ Inactive / Depth: / Casing: Comments: Do you plan to use this well? ☐ Yes ☐ No Comments:	☐ Well in Good Condition ☐ Well in Use ☐ Abandoned ☐ Damaged ☐ Well on Standby ☐ Well Should Be Destroyed Comments:

***This form must be completed and submitted with any Well Construction Application for a water supply well. Also attach a map showing all well locations with respect to property boundaries and structures.**


BAVC
Site Location Map
Legend
Proposed Test Well Location
Chitactac-Adams Heritage County Park
Burchell Rd
Redwood Retreat Rd
Local Gate Service
Proposed Test Well Location
Dhamma Santosa
Watsonville Rd
Pharmer Rd
Carman's Nursery
El Matador Dr
Google Earth
N
2000 ft


BAVC
Proposed Test Well Location Map
Legend
Proposed Test Well Location
Redwood Retreat Rd
Approximate location of existing well.
Approximate property line
Local Gate Service
Well located 231-feet from northern property line and 55-feet from southeastern property line.
Proposed Test Well Location
El Matador Dr
Watsonville Rd
Google Earth
N
500 ft

BAY AREA VIPASSANA CENTER

APN 756-30-024
9201 EL MATADOR DRIVE
GILROY, CA

Approximate Scale

Feet

0 1,050 2,100

Wells

- A01: Water Supply - Active
- S: Water Supply - Standby
- IS01: Water Supply - Inactive
- A02: Extraction (Env) - Active
- I02: Extraction (Env) - Inactive
- A: Other - Active
- I: Other - Inactive
- B: Abandoned
- D: Destroyed
- Undet: Status Undetermined

5/3/2022

Valley Water
Well Construction
Completion Notice

Valley Water

WELL CONSTRUCTION COMPLETION NOTICE

FC 158A (02-11-21)

Inspector: C Ramos	Date of Inspection: 5/26/22	Permit: C20220519001
Well Owner: Bay Area Vipassana Ctr	Owner Well No.: TW2	Well Registration No.: 10S03E32A001
Address of Well Site: 9201 El Matador Dr	City or County: Gilroy	
Drilling Company: Guandalino	Consultant: Luhdorff + Scalmanini	

Cond. Bore: —	Conductor Depth: —	Conductor Diameter & Material: —	TD: 160	Boring Diameter: 14	BOC: 155
Casing Diameter & Material: 6" PVC	Slot Size: .032	Screen Interval(s): 70-110, 130-150			
Filter Pack Material: 8X16	Filter Pack Interval(s): 52-115, 125-160	Bent: 50-52, 115-125		Seal Depth: 52	

Sealing Material: ☐ Neat Cement ☒ 10 Sack Sand Slurry ☐ Bentonite Slurry ☐ Other (See Comments)

Drilling Method: ☐ HSA ☐ Direct Push ☒ Mud Rotary ☐ Air Rotary ☐ Other (See Comments)

Well Type: ☐ GW Monitoring ☐ GW Extraction ☐ Vadose Monitoring ☐ Vadose Extraction ☐ Cathodic ☐ Domestic ☐ Agricultural ☐ Municipal/Industrial ☐ Elevator ☒ Other (See Comments)

Well constructed according to provisions of Santa Clara Valley Water District Permit? ☒ Yes ☐ No (See Comments)

Well Location: 365 ft. N/S (S) Redwood Retreat Rd 123 ft. E/W (E) El Matador Dr.

GPS Coordinates: Lat. Long.

Comments: Test Well

Distribution: **ORIGINAL**–Permit File; **YELLOW**– Permittee; **PINK**–Well File

DWR
Well Completion Report

State of California

Well Completion Report

Form DWR 188 Submitted 6/13/2022

WCR2022-006590

Owner's Well Number: TW2 | Date Work Began: 05/24/2022 | Date Work Ended: 05/27/2022

Local Permit Agency: Santa Clara Valley Water District

Secondary Permit Agency: | Permit Number: C20220519001 | Permit Date: 05/19/2022

Well Owner (must remain confidential pursuant to Water Code 13752)

Name: BAY AREA VIPASSANA CENTER,

Mailing Address: 530 Lawrence Expressway #365

City: Sunnyvale | State: CA | Zip: 94085

Planned Use and Activity

Activity: New Well

Planned Use: Test Well

Well Location

Address: 9201 El Matador DR

City: Gilroy | Zip: 95020 | County: Santa Clara

Latitude: 37 Deg. 1 Min. 32.6711 Sec. N | Longitude: -121 Deg. 39 Min. 25.0991 Sec. W

Dec. Lat.: 37.025742 | Dec. Long.: -121.656972

Vertical Datum: | Horizontal Datum: WGS84

Location Accuracy: 5 Ft | Location Determination Method: GPS

APN: 756-30-024

Township: 10 S

Range: 03 E

Section: 32

Baseline Meridian: Mount Diablo

Ground Surface Elevation: 306

Elevation Accuracy: 1 Ft

Elevation Determination Method: GPS

Borehole Information

Orientation: Vertical | Specify:

Drilling Method: Downhole Hammer | Drilling Fluid: Bentonite

Total Depth of Boring: 160 Feet

Total Depth of Completed Well: 155 Feet

Water Level and Yield of Completed Well

Depth to first water: 32 (Feet below surface)

Depth to Static Water Level: 32 (Feet) | Date Measured: 05/27/2022

Estimated Yield*: 30 (GPM) | Test Type: Air Lift

Test Length: 3 (Hours) | Total Drawdown: (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	20	Gravelly Clay - low plastic, dark brown, small gravel, a little sand
20	60	Sandy Gravel - small to large gravel, sub-angular to sub-round, fine to very coarse sand, quartz rich, some chips of poorly indurated orange sandstone
60	70	Clay - non-plastic gray mudstone
70	100	Sand - fine to very coarse orange sand, quartz rich, some chips of poorly indurated orange sandstone.
100	130	Sand - fine to coarse, gray , poorly indurated sandstone
130	150	Sand - coarse to very coarse, quartz rich
150	160	Sand - very fine to medium, pale gravy, poorly indurated sandstone

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	70	Blank	PVC	OD: 6.625 in. | SDR: 21 | Thickness: 0.316 in.	0.316	6.625			
1	70	110	Screen	PVC	OD: 6.625 in. | SDR: 21 | Thickness: 0.316 in.	0.316	6.625	Milled Slots	0.032	
1	110	130	Blank	PVC	OD: 6.625 in. | SDR: 21 | Thickness: 0.316 in.	0.316	6.625			
1	130	150	Screen	PVC	OD: 6.625 in. | SDR: 21 | Thickness: 0.316 in.	0.316	6.625	Milled Slots	0.032	
1	150	155	Blank	PVC	OD: 6.625 in. | SDR: 21 | Thickness: 0.316 in.	0.316	6.625			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	50	Cement	10.3 Sack Mix		sand slurry
50	52	Bentonite	Non Hydrated Bentonite		3/8 hole plug
52	115	Filter Pack	8 x 16		washed gravel
115	125	Bentonite	Non Hydrated Bentonite		3/8 hole plug
125	160	Filter Pack	8 x 16		washed gravel

Other Observations:
Test hole was drilled with air-rotary and converted to mud-rotary for reaming.

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	160	14

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: GUARDINO WELL DRILLING INC (Person, Firm or Corporation)

4825 CROY ROAD (Address) | MORGAN HILL (City) | CA (State) | 95037 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 06/13/2022 (Date Signed) | 664960 (C-57 License Number)

Attachments

water well diagram with notes.xlsx - Well Construction Diagram

DWR Use Only

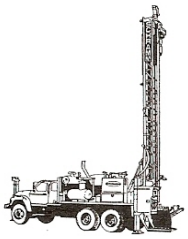
CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

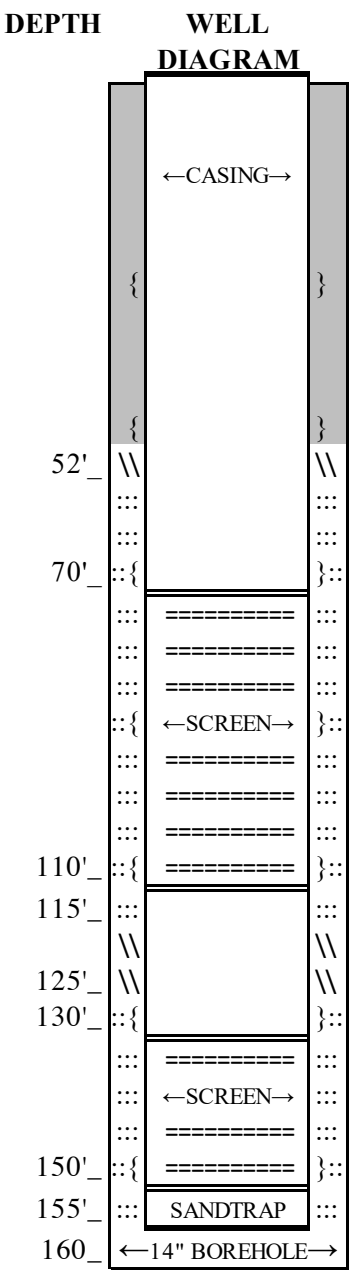
APN:



GUARDINO WELL DRILLING, INC.

4825 CROY ROAD, MORGAN HILL, CA 95037
PHONE (408) 779-5904 FAX (408) 778-1692
www.guardinowell.com

WATER WELL CONSTRUCTION DIAGRAM



WELL INFORMATION:

Well Owner:	BAVC
Well ID/No.:	TW2
Permit No.:	C20220519001
Location:	9201 El Matador Dr. Gilroy, CA 95020
Date Filed:	6/13/22
Submitted By:	Augie Guardino

DRILLING DATA:

Driller:	J. Martinez
Rig No.:	S685
Shaker No.:	PS550
Bit:	Hole opener
Fluid:	Bentonite mud
Consultant:	*Luhdorff & Scalmanini*

CONSTRUCTION MATERIALS:

Blank Casing:	6" PVC	
Screen:	6" PVC	.032" factory
Gravel Size:	8 x 16	washed

CONSTRUCTION NOTES:

≈ Test hole was drilled air-rotary and converted to mud-rotary for reaming.

≈ Casing was hung plumb and center during gravel pack and seal installation.

WELL DIAGRAM KEY:

10.3 sack sand-slurry cement
{ } centralizers
═ perforated (screen) casing
\\ 3/8" bentonite hole plug chips
::: gravel (sand/filter) pack

Family Owned and Operated Since 1929

CA Lic. # 664960