

Gregory Knapp  
Director Environmental Affairs, Region West  
12667 Alcosta Blvd , San Ramon, CA 94583  
(925) 244-6570

January 15, 2015

Mr. Rob Eastwood  
Principal Planner, County of Santa Clara  
Santa Clara County Planning Department

RE: Pond 30 December Stormwater Results

Dear Mr. Eastwood

Attached are the lab sheets for the December 2014 stormwater analysis results from discharges out of Pond 30. We have included a summary of the results below, as you requested. Note that the sampling results show a general increase in recorded total recoverable selenium in comparison to the past two seasons. We are analyzing the causes for this, which may include the large storm flows associated with December storms and reclamation grading during the fall which was anticipated to generate a temporary increase in selenium in runoff. We intend to meet in short order to discuss the results in more detail.

*Sample Date December 2*

Total Recoverable Selenium: 26 micrograms/liter (ug/L or parts per billion)  
Mercury: 2.47 ug/L  
Oil & Grease: Non Detect (ND)  
Settleable Solids: 80 milliliters per liter/hour (ml/L-hr)  
Total Suspended Solids (TSS): 7100 milligrams/liter (mg/L)  
Hexavalent chromium ("Chromium 6"): 1.5 ug/L  
Total Recoverable Nickel: 890 ug/L  
Thallium: 3.2 ug/L

*Sample Date December 12*

Total Recoverable Selenium: 65 ug/L  
Mercury: ND  
Total Dissolved Solids (TDS): 170 mg/L Total  
Recoverable Nickel: 14 ug/L  
Total Recoverable Thallium: 0.24 ug/L  
Total Recoverable Antimony: 1.1 ug/L  
Total Recoverable Arsenic 3.4 ug/L  
Total Recoverable Beryllium: ND  
Total Recoverable Cadmium: 0.26 ug/L  
Total Recoverable Chromium: 3.9 ug/L  
Total Recoverable Copper: 9.6 ug/L  
Total Recoverable Lead: 0.15 ug/L  
Total Recoverable Silver: ND Total  
Recoverable Zinc: 67 ug/L

*Sample Date December 22*

Total Recoverable Selenium: 81 ug/L  
Mercury: ND  
Total Dissolved Solids (TDS): 2800 mg/L  
Total Recoverable Nickel: 21 ug/L Total  
Recoverable Thallium: ND Total  
Recoverable Antimony: ND Total  
Recoverable Arsenic 3.9 ug/L Total  
Recoverable Beryllium: ND  
Total Recoverable Cadmium: 0.31 ug/L  
Total Recoverable Chromium: 3.3 ug/L  
Total Recoverable Copper: 8.3 ug/L Total  
Recoverable Lead: 0.25 ug/L Total  
Recoverable Silver: ND  
Total Recoverable Zinc: 60 ug/L

Any page labeled "Quality Control" indicates reported laboratory method tests using spiked samples to assure actual result accuracy. These results are not actual samples from Pond 30. Any page labeled "Chain of Custody" indicates the transfer of samples from the field through the various laboratories.

Please contact me with any questions.

A handwritten signature in blue ink that reads "Gregory Knapp". The signature is written in a cursive style and is placed on a light yellow rectangular background.

Gregory Knapp  
Director Environmental Affairs  
Lehigh Hanson Region West



Date of Report: 01/08/2015

George Wegmann

Golder Associates

425 Lakeside Drive  
Sunnyvale, CA 94085

Client Project: 063-7109-916

BCL Project: Lehigh Pond

BCL Work Order: 1430607

Invoice ID: B192974

Enclosed are the results of analyses for samples received by the laboratory on 12/22/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Golder Associates CHAIN OF CUSTODY



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PROJECT NO.: 063-7109-916		SITE NAME: Lehigh Pond 30		ANALYSES		EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
SAMPLER(S): David Walker (printed)		David C. Walt (signature)		TDS		EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
CONTRACT LABORATORY: BC Labs		Container Info		K-SETTERS			
TURN-AROUND TIME: Standard		Type/Vol. 1L 500ml		PP13 (200-serve)			
Sample I.D. Pond 30	Lab I.D. -1	Collection		Filter N	Preserv. - HNO3	Depth 1	Remarks
		Date 10-20-14	Time 1400				
Relinquished by: (signature) David C. Walt		Received by: (signature) [Signature]		Date/Time: 12/22/14 1305		SEND RESULTS TO: Attn: George Wegmann, Greg Knapp	
Relinquished by: (signature) [Signature]		Received by: (signature) Henry Boegen		Date/Time: 12-22-14 1445		Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224	
Relinquished by: (signature) Henry Boegen		Received by: (signature) [Signature]		Date/Time: 12-22-14 18:30			

CHK BY DISTRIBUTION [Signature] SUB-OUT [Signature]

REL: [Signature] 12-22-14 1445

white: lab copy yellow: project file

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BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-30607

**SHIPPING INFORMATION**  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None   
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received YES  NO

Emissivity: 0.98 Container: P15 Thermometer ID: 108 Date/Time: 12/23/14 2:55  
 Temperature: (A) 1.6 °C (C) 1.2 °C Analyst Init: [Signature]

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	A									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	B									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 12/23/14 2:07:20 [S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\ISAMREC]

Sample Numbering Completed By: [Signature] A = Actual / C = Corrected



Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:37  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430607-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/22/2014 21:45
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/20/2014 14:00
	<b>Sampling Location:</b>	Pond 30	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	Pond 30	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter	<b>Sample Type:</b>	Water

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**Project Manager:** George Wegmann

### Water Analysis (General Chemistry)

<b>BCL Sample ID:</b> 1430607-01	<b>Client Sample Name:</b> Pond 30, Pond 30, 12/20/2014 2:00:00PM, David Walter
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Dissolved Solids @ 180 C	2800	mg/L	100	100	EPA-160.1	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-160.1	12/26/14	12/26/14 13:00	CAD	MANUAL	10	BXL2402

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**Project Manager:** George Wegmann

### Metals Analysis

<b>BCL Sample ID:</b> 1430607-01	<b>Client Sample Name:</b> Pond 30, Pond 30, 12/20/2014 2:00:00PM, David Walter
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Antimony	ND	ug/L	4.0	0.22	EPA-200.8	ND	A07	1
<b>Total Recoverable Arsenic</b>	<b>3.9</b>	<b>ug/L</b>	<b>4.0</b>	<b>1.4</b>	<b>EPA-200.8</b>	ND	<b>J,A07</b>	1
Total Recoverable Beryllium	ND	ug/L	2.0	0.46	EPA-200.8	ND	A07	1
<b>Total Recoverable Cadmium</b>	<b>0.31</b>	<b>ug/L</b>	<b>2.0</b>	<b>0.22</b>	<b>EPA-200.8</b>	ND	<b>J,A07</b>	1
<b>Total Recoverable Chromium</b>	<b>3.3</b>	<b>ug/L</b>	<b>6.0</b>	<b>1.0</b>	<b>EPA-200.8</b>	ND	<b>J,A07</b>	1
<b>Total Recoverable Copper</b>	<b>8.3</b>	<b>ug/L</b>	<b>4.0</b>	<b>0.44</b>	<b>EPA-200.8</b>	ND	<b>A07</b>	1
<b>Total Recoverable Lead</b>	<b>0.25</b>	<b>ug/L</b>	<b>2.0</b>	<b>0.20</b>	<b>EPA-200.8</b>	ND	<b>J,A07</b>	1
Total Recoverable Mercury	ND	ug/L	0.20	0.033	EPA-245.1	ND		2
<b>Total Recoverable Nickel</b>	<b>21</b>	<b>ug/L</b>	<b>4.0</b>	<b>0.38</b>	<b>EPA-200.8</b>	ND	<b>A07</b>	1
<b>Total Recoverable Selenium</b>	<b>81</b>	<b>ug/L</b>	<b>4.0</b>	<b>0.38</b>	<b>EPA-200.8</b>	ND	<b>A07</b>	1
Total Recoverable Silver	ND	ug/L	2.0	0.20	EPA-200.8	ND	A07	1
Total Recoverable Thallium	ND	ug/L	2.0	0.20	EPA-200.8	ND	A07	1
<b>Total Recoverable Zinc</b>	<b>60</b>	<b>ug/L</b>	<b>20</b>	<b>3.4</b>	<b>EPA-200.8</b>	ND	<b>A07</b>	1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-200.8	01/07/15	01/08/15	13:27	EAR	PE-EL2	2	BYA0348
2	EPA-245.1	01/07/15	01/07/15	17:26	MEV	CETAC1	1	BYA0293

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## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BXL2402</b>						
Total Dissolved Solids @ 180 C	BXL2402-BLK1	ND	mg/L	6.7	6.7	

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## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BXL2402</b>										
Total Dissolved Solids @ 180 C	BXL2402-BS1	LCS	565.00	586.00	mg/L	96.4		90	110	

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## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BXL2402</b>		Used client sample: Y - Description: Pond 30, 12/20/2014 14:00									
Total Dissolved Solids @ 180 C	DUP	1430607-01	2830.0	2840.0		mg/L	0.4		10		

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### Metals Analysis

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYA0293</b>						
Total Recoverable Mercury	BYA0293-BLK1	ND	ug/L	0.20	0.033	
<b>QC Batch ID: BYA0348</b>						
Total Recoverable Antimony	BYA0348-BLK1	ND	ug/L	2.0	0.11	
Total Recoverable Arsenic	BYA0348-BLK1	ND	ug/L	2.0	0.70	
Total Recoverable Beryllium	BYA0348-BLK2	ND	ug/L	1.0	0.23	
Total Recoverable Cadmium	BYA0348-BLK1	ND	ug/L	1.0	0.11	
Total Recoverable Chromium	BYA0348-BLK1	ND	ug/L	3.0	0.50	
Total Recoverable Copper	BYA0348-BLK1	ND	ug/L	2.0	0.22	
Total Recoverable Lead	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Nickel	BYA0348-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Selenium	BYA0348-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Silver	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Thallium	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Zinc	BYA0348-BLK1	ND	ug/L	10	1.7	

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### Metals Analysis

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0293</b>										
Total Recoverable Mercury	BYA0293-BS1	LCS	0.99750	1.0000	ug/L	99.8		85	115	
<b>QC Batch ID: BYA0348</b>										
Total Recoverable Antimony	BYA0348-BS1	LCS	41.048	40.000	ug/L	103		85	115	
Total Recoverable Arsenic	BYA0348-BS1	LCS	105.54	100.00	ug/L	106		85	115	
Total Recoverable Beryllium	BYA0348-BS2	LCS	45.832	40.000	ug/L	115		85	115	
Total Recoverable Cadmium	BYA0348-BS1	LCS	42.892	40.000	ug/L	107		85	115	
Total Recoverable Chromium	BYA0348-BS1	LCS	43.366	40.000	ug/L	108		85	115	
Total Recoverable Copper	BYA0348-BS1	LCS	110.91	100.00	ug/L	111		85	115	
Total Recoverable Lead	BYA0348-BS1	LCS	103.18	100.00	ug/L	103		85	115	
Total Recoverable Nickel	BYA0348-BS1	LCS	107.54	100.00	ug/L	108		85	115	
Total Recoverable Selenium	BYA0348-BS1	LCS	104.66	100.00	ug/L	105		85	115	
Total Recoverable Silver	BYA0348-BS1	LCS	41.670	40.000	ug/L	104		85	115	
Total Recoverable Thallium	BYA0348-BS1	LCS	40.919	40.000	ug/L	102		85	115	
Total Recoverable Zinc	BYA0348-BS1	LCS	110.65	100.00	ug/L	111		85	115	

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Project Manager: George Wegmann

### Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0293</b>		Used client sample: N								
Total Recoverable Mercury	DUP	1430474-04	ND	ND		ug/L			20	
	MS	1430474-04	ND	0.99250	1.0000	ug/L		99.2		70 - 130
	MSD	1430474-04	ND	1.0125	1.0000	ug/L	2.0	101	20	70 - 130
<b>QC Batch ID: BYA0348</b>		Used client sample: N								
Total Recoverable Antimony	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	40.190	40.000	ug/L		100		70 - 130
	MSD	1430603-01	ND	41.191	40.000	ug/L	2.5	103	20	70 - 130
Total Recoverable Arsenic	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	110.99	100.00	ug/L		111		70 - 130
	MSD	1430603-01	ND	112.57	100.00	ug/L	1.4	113	20	70 - 130
Total Recoverable Beryllium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	40.061	40.000	ug/L		100		70 - 130
	MSD	1430603-01	ND	40.749	40.000	ug/L	1.7	102	20	70 - 130
Total Recoverable Cadmium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	37.127	40.000	ug/L		92.8		70 - 130
	MSD	1430603-01	ND	37.972	40.000	ug/L	2.3	94.9	20	70 - 130
Total Recoverable Chromium	DUP	1430603-01	ND	0.76000		ug/L			20	J
	MS	1430603-01	ND	38.752	40.000	ug/L		96.9		70 - 130
	MSD	1430603-01	ND	39.850	40.000	ug/L	2.8	99.6	20	70 - 130
Total Recoverable Copper	DUP	1430603-01	3.6450	3.4230		ug/L	6.3		20	
	MS	1430603-01	3.6450	103.05	100.00	ug/L		99.4		70 - 130
	MSD	1430603-01	3.6450	103.38	100.00	ug/L	0.3	99.7	20	70 - 130
Total Recoverable Lead	DUP	1430603-01	0.15400	ND		ug/L			20	
	MS	1430603-01	0.15400	112.07	100.00	ug/L		112		70 - 130
	MSD	1430603-01	0.15400	112.62	100.00	ug/L	0.5	112	20	70 - 130
Total Recoverable Nickel	DUP	1430603-01	31.888	32.020		ug/L	0.4		20	
	MS	1430603-01	31.888	117.79	100.00	ug/L		85.9		70 - 130
	MSD	1430603-01	31.888	119.21	100.00	ug/L	1.2	87.3	20	70 - 130
Total Recoverable Selenium	DUP	1430603-01	0.92400	1.2630		ug/L	31.0		20	J,A02
	MS	1430603-01	0.92400	107.02	100.00	ug/L		106		70 - 130
	MSD	1430603-01	0.92400	108.35	100.00	ug/L	1.2	107	20	70 - 130
Total Recoverable Silver	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	38.733	40.000	ug/L		96.8		70 - 130
	MSD	1430603-01	ND	39.055	40.000	ug/L	0.8	97.6	20	70 - 130
Total Recoverable Thallium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	45.200	40.000	ug/L		113		70 - 130
	MSD	1430603-01	ND	45.332	40.000	ug/L	0.3	113	20	70 - 130

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Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:37  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0348</b>		Used client sample: N								
Total Recoverable Zinc	DUP	1430603-01	6.4950	5.6730		ug/L	13.5		20	J
	MS	1430603-01	6.4950	102.20	100.00	ug/L		95.7		70 - 130
	MSD	1430603-01	6.4950	101.66	100.00	ug/L	0.5	95.2	20	70 - 130

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Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:37  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected at or above the reporting limit
- PQL Practical Quantitation Limit
- RPD Relative Percent Difference
- A02 The difference between duplicate readings is less than the PQL.
- A07 PQL's were raised due to sample dilution caused by high analyte concentration or matrix interference.



Date of Report: 01/08/2015

George Wegmann

Golder Associates

425 Lakeside Drive  
Sunnyvale, CA 94085

Client Project: 063-7109-916

BCL Project: Lehigh Pond

BCL Work Order: 1430608

Invoice ID: B192975

Enclosed are the results of analyses for samples received by the laboratory on 12/22/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Golder Associates CHAIN OF CUSTODY



Page 1 of 1 Quotation No. 14-30608

PROJECT NO.: 063-7109-916 SITE NAME: Pond 30  
 SAMPLER(S): David Walter (printed) David C. Malt (signature) heigh NPDES  
 CONTRACT LABORATORY: BC Labs Container Info: Standard  
 TURN-AROUND TIME: Standard

Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol.			Remarks		
		Date	Time			Filter	Preserv.	Cont. Qty.			
PD30	-1	12-12-14	1710	W		1	N	1	1	3	PD30 = Pond 30

ANALYSES: TDS, Nitrate, Hg, Pb (200-series)

EDD required?  Yes  No  
 EDF required?  Yes  No

CHK BY: MWL DISTRIBUTION SUB-CUT

SEND RESULTS TO: Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224  
 Attn: George Wegmann, Greg Knapp, Chow kip

Requisitioned by: (signature) David C. Malt  
 Relinquished by: (signature) Gary Bogen 12-22-14 18:30  
 Received by: (signature) Gary Bogen 12-22-14 18:30  
 Date/Time: 12/22/14 13:05  
 Date/Time: 12-22-14 14:45  
 Date/Time: 12-22-14 18:30

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BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-30608

**SHIPPING INFORMATION**  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  
 YES  NO

Emissivity: 0.98 Container: 115 Thermometer ID: 108 Date/Time: 12/23/14 2:55  
 Temperature: (A) 1.6 °C (C) 1.2 °C Analyst Init: [Signature]

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	A									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	B									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR	C									
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 12/23/14 (20720) (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC)

Sample Numbering Completed By: [Signature] A = Actual / C = Corrected



Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430608-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/22/2014 21:45
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/12/2014 17:10
	<b>Sampling Location:</b>	PD30	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	PD30	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter	<b>Sample Type:</b>	Water

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425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Water Analysis (General Chemistry)

<b>BCL Sample ID:</b> 1430608-01	<b>Client Sample Name:</b> PD30, PD30, 12/12/2014 5:10:00PM, David Walter
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Dissolved Solids @ 180 C	170	mg/L	6.7	6.7	EPA-160.1	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-160.1	12/26/14	12/26/14 13:00	CAD	MANUAL	0.667	BXL2402

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Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Metals Analysis

<b>BCL Sample ID:</b> 1430608-01	<b>Client Sample Name:</b> PD30, PD30, 12/12/2014 5:10:00PM, David Walter
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Antimony	1.1	ug/L	2.0	0.11	EPA-200.8	ND	J	1
Total Recoverable Arsenic	3.4	ug/L	2.0	0.70	EPA-200.8	ND		1
Total Recoverable Beryllium	ND	ug/L	1.0	0.23	EPA-200.8	ND		2
Total Recoverable Cadmium	0.26	ug/L	1.0	0.11	EPA-200.8	ND	J	1
Total Recoverable Chromium	3.9	ug/L	3.0	0.50	EPA-200.8	ND		1
Total Recoverable Copper	9.6	ug/L	2.0	0.22	EPA-200.8	ND		1
Total Recoverable Lead	0.15	ug/L	1.0	0.10	EPA-200.8	ND	J	1
Total Recoverable Mercury	ND	ug/L	0.20	0.033	EPA-245.1	ND		3
Total Recoverable Nickel	14	ug/L	2.0	0.19	EPA-200.8	ND		1
Total Recoverable Selenium	65	ug/L	2.0	0.19	EPA-200.8	ND		1
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		1
Total Recoverable Thallium	0.24	ug/L	1.0	0.10	EPA-200.8	ND	J	1
Total Recoverable Zinc	67	ug/L	10	1.7	EPA-200.8	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-200.8	01/07/15	01/07/15 23:45	SRM	PE-EL2	1	BYA0348
2	EPA-200.8	01/07/15	01/08/15 13:31	EAR	PE-EL2	1	BYA0348
3	EPA-245.1	01/07/15	01/07/15 17:29	MEV	CETAC1	1	BYA0293

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Project: Lehigh Pond  
Project Number: 063-7109-916  
Project Manager: George Wegmann

### Water Analysis (General Chemistry)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BXL2402</b>						
Total Dissolved Solids @ 180 C	BXL2402-BLK1	ND	mg/L	6.7	6.7	

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**Reported:** 01/08/2015 19:38  
Project: Lehigh Pond  
Project Number: 063-7109-916  
Project Manager: George Wegmann

### Water Analysis (General Chemistry)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BXL2402</b>										
Total Dissolved Solids @ 180 C	BXL2402-BS1	LCS	565.00	586.00	mg/L	96.4		90	110	

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**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BXL2402</b>		Used client sample: Y - Description: Pond 30, 12/20/2014 14:00									
Total Dissolved Solids @ 180 C	DUP	1430607-01	2830.0	2840.0		mg/L	0.4		10		

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**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Metals Analysis

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYA0293</b>						
Total Recoverable Mercury	BYA0293-BLK1	ND	ug/L	0.20	0.033	
<b>QC Batch ID: BYA0348</b>						
Total Recoverable Antimony	BYA0348-BLK1	ND	ug/L	2.0	0.11	
Total Recoverable Arsenic	BYA0348-BLK1	ND	ug/L	2.0	0.70	
Total Recoverable Beryllium	BYA0348-BLK2	ND	ug/L	1.0	0.23	
Total Recoverable Cadmium	BYA0348-BLK1	ND	ug/L	1.0	0.11	
Total Recoverable Chromium	BYA0348-BLK1	ND	ug/L	3.0	0.50	
Total Recoverable Copper	BYA0348-BLK1	ND	ug/L	2.0	0.22	
Total Recoverable Lead	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Nickel	BYA0348-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Selenium	BYA0348-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Silver	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Thallium	BYA0348-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Zinc	BYA0348-BLK1	ND	ug/L	10	1.7	

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Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Metals Analysis

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0293</b>										
Total Recoverable Mercury	BYA0293-BS1	LCS	0.99750	1.0000	ug/L	99.8		85	115	
<b>QC Batch ID: BYA0348</b>										
Total Recoverable Antimony	BYA0348-BS1	LCS	41.048	40.000	ug/L	103		85	115	
Total Recoverable Arsenic	BYA0348-BS1	LCS	105.54	100.00	ug/L	106		85	115	
Total Recoverable Beryllium	BYA0348-BS2	LCS	45.832	40.000	ug/L	115		85	115	
Total Recoverable Cadmium	BYA0348-BS1	LCS	42.892	40.000	ug/L	107		85	115	
Total Recoverable Chromium	BYA0348-BS1	LCS	43.366	40.000	ug/L	108		85	115	
Total Recoverable Copper	BYA0348-BS1	LCS	110.91	100.00	ug/L	111		85	115	
Total Recoverable Lead	BYA0348-BS1	LCS	103.18	100.00	ug/L	103		85	115	
Total Recoverable Nickel	BYA0348-BS1	LCS	107.54	100.00	ug/L	108		85	115	
Total Recoverable Selenium	BYA0348-BS1	LCS	104.66	100.00	ug/L	105		85	115	
Total Recoverable Silver	BYA0348-BS1	LCS	41.670	40.000	ug/L	104		85	115	
Total Recoverable Thallium	BYA0348-BS1	LCS	40.919	40.000	ug/L	102		85	115	
Total Recoverable Zinc	BYA0348-BS1	LCS	110.65	100.00	ug/L	111		85	115	

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Sunnyvale, CA 94085

Reported: 01/08/2015 19:38  
Project: Lehigh Pond  
Project Number: 063-7109-916  
Project Manager: George Wegmann

### Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0293</b>		Used client sample: N								
Total Recoverable Mercury	DUP	1430474-04	ND	ND		ug/L			20	
	MS	1430474-04	ND	0.99250	1.0000	ug/L		99.2		70 - 130
	MSD	1430474-04	ND	1.0125	1.0000	ug/L	2.0	101	20	70 - 130
<b>QC Batch ID: BYA0348</b>		Used client sample: N								
Total Recoverable Antimony	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	40.190	40.000	ug/L		100		70 - 130
	MSD	1430603-01	ND	41.191	40.000	ug/L	2.5	103	20	70 - 130
Total Recoverable Arsenic	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	110.99	100.00	ug/L		111		70 - 130
	MSD	1430603-01	ND	112.57	100.00	ug/L	1.4	113	20	70 - 130
Total Recoverable Beryllium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	40.061	40.000	ug/L		100		70 - 130
	MSD	1430603-01	ND	40.749	40.000	ug/L	1.7	102	20	70 - 130
Total Recoverable Cadmium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	37.127	40.000	ug/L		92.8		70 - 130
	MSD	1430603-01	ND	37.972	40.000	ug/L	2.3	94.9	20	70 - 130
Total Recoverable Chromium	DUP	1430603-01	ND	0.76000		ug/L			20	J
	MS	1430603-01	ND	38.752	40.000	ug/L		96.9		70 - 130
	MSD	1430603-01	ND	39.850	40.000	ug/L	2.8	99.6	20	70 - 130
Total Recoverable Copper	DUP	1430603-01	3.6450	3.4230		ug/L	6.3		20	
	MS	1430603-01	3.6450	103.05	100.00	ug/L		99.4		70 - 130
	MSD	1430603-01	3.6450	103.38	100.00	ug/L	0.3	99.7	20	70 - 130
Total Recoverable Lead	DUP	1430603-01	0.15400	ND		ug/L			20	
	MS	1430603-01	0.15400	112.07	100.00	ug/L		112		70 - 130
	MSD	1430603-01	0.15400	112.62	100.00	ug/L	0.5	112	20	70 - 130
Total Recoverable Nickel	DUP	1430603-01	31.888	32.020		ug/L	0.4		20	
	MS	1430603-01	31.888	117.79	100.00	ug/L		85.9		70 - 130
	MSD	1430603-01	31.888	119.21	100.00	ug/L	1.2	87.3	20	70 - 130
Total Recoverable Selenium	DUP	1430603-01	0.92400	1.2630		ug/L	31.0		20	J,A02
	MS	1430603-01	0.92400	107.02	100.00	ug/L		106		70 - 130
	MSD	1430603-01	0.92400	108.35	100.00	ug/L	1.2	107	20	70 - 130
Total Recoverable Silver	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	38.733	40.000	ug/L		96.8		70 - 130
	MSD	1430603-01	ND	39.055	40.000	ug/L	0.8	97.6	20	70 - 130
Total Recoverable Thallium	DUP	1430603-01	ND	ND		ug/L			20	
	MS	1430603-01	ND	45.200	40.000	ug/L		113		70 - 130
	MSD	1430603-01	ND	45.332	40.000	ug/L	0.3	113	20	70 - 130

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Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYA0348</b>		Used client sample: N								
Total Recoverable Zinc	DUP	1430603-01	6.4950	5.6730		ug/L	13.5		20	J
	MS	1430603-01	6.4950	102.20	100.00	ug/L		95.7		70 - 130
	MSD	1430603-01	6.4950	101.66	100.00	ug/L	0.5	95.2	20	70 - 130

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**Reported:** 01/08/2015 19:38  
**Project:** Lehigh Pond  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected at or above the reporting limit
- PQL Practical Quantitation Limit
- RPD Relative Percent Difference
- A02 The difference between duplicate readings is less than the PQL.





Date of Report: 12/23/2014

George Wegmann

Golder Associates

425 Lakeside Drive  
Sunnyvale, CA 94085

Client Project: 063-7109-916

BCL Project: Lehigh NPDES

BCL Work Order: 1428700

Invoice ID: B191556

Enclosed are the results of analyses for samples received by the laboratory on 12/3/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Golder Associates CHAIN OF CUSTODY



PROJECT NO.: 063-7109-916

SITE NAME: (Quarterly) Lehigh NPDES

SAMPLER(S): David Walker (printed) David C. Valt (signature)

CONTRACT LABORATORY: BC Labs

TURN-AROUND TIME: Standard

Quotation No. Page 1 of 1

EDD required? Yes No EDF required? Yes No

ANALYSES table with columns for parameters like TSS, Chloride, Hg, etc.

Main data table with columns for Sample I.D., Lab I.D., Collection Date, Matrix, Depth, Type/Vol., Filter, Preserv., and Remarks.

SEND RESULTS TO: Golder Associates Inc., 425 Lakeside Drive, Sunnyvale, CA 94085

white: lab copy yellow: project file



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 of 1

Submission #: 14-28700

**SHIPPING INFORMATION**  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  
 YES  NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 12/31/14 2200  
 Temperature: (A) 0.8 °C / (C) 0.4 °C Analyst Init: KLB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	A		A	A	A	A	A			
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	B		B	B	B	B	B			
PT CYANIDE Hg Glass 1631	C	A	C	C	C	C	C			
PT NITROGEN FORMS					E	E				
PT TOTAL SULFIDE					D	D	D			
2oz. NITRATE/NITRITE CR6	D		D	D						
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1	E		E	E			E			
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 12/31/14 2358 IS:WPDoc\WordPerfect\LAB\_DOCS\FORMS\ISAMREC\

Sample Numbering Completed By: M A = Actual / C = Corrected

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14-28700 Methods

Parameter	Method	RL	Units
Chromium (VI)	SM 3500	5	µg/L
Mercury	1631	0.002	ng/L
Nickel	249.2	1	µg/L
Selenium	200.8	1	µg/L
Thallium	279.2	1	µg/L
Sulfides			
Total Dissolved Solids	SM2540C	10	mg/L
Chloride	EPA 300.0	12	mg/L
Hardness	SM2520B	2	mg/L
TSS	SM2540D	1	mg/L
Oil and Grease	EPA 1664A	1.4	mg/L
TOC	EPA 9060A		mg/L
Settleable Matter	SM2540F	0.10	mL/L-hr

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Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1428700-01	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 07:45
	<b>Sampling Location:</b>	EFF-005		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	EFF-005		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-02	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/03/2014 07:45
	<b>Sampling Location:</b>	FB		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	FB		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-03	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 09:45
	<b>Sampling Location:</b>	EFF-006		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	EFF-006		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-04	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 11:00
	<b>Sampling Location:</b>	EFF-003		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	EFF-003		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-05	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 10:25
	<b>Sampling Location:</b>	RSW-004		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	RSW-004		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-06	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 11:30
	<b>Sampling Location:</b>	RSW-003		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	RSW-003		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water
1428700-07	<b>COC Number:</b>	---		12/03/2014 22:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	12/02/2014 14:00
	<b>Sampling Location:</b>	EFF-001		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	EFF-001		<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	David Walter		<b>Sample Type:</b>	Water

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### EPA Method 1664

<b>BCL Sample ID:</b> 1428700-03	<b>Client Sample Name:</b> EFF-006, EFF-006, 12/2/2014 9:45:00AM, David Walter
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	1.2	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	12/11/14	12/11/14 07:00	MAM	MAN-SV	1	BXL1387

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Water Analysis (General Chemistry)

<b>BCL Sample ID:</b> 1428700-03	<b>Client Sample Name:</b> EFF-006, EFF-006, 12/2/2014 9:45:00AM, David Walter
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Suspended Solids (Glass Fiber)	7100	mg/L	33	33	SM-2540D	ND		1
Settleable Solids	80	ml/L-hr	0.10	0.10	SM-2540F			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	SM-2540D	12/08/14	12/08/14 11:35	VV1	MANUAL	66.667	BXL0753
2	SM-2540F	12/04/14	12/04/14 08:00	MSA	MANUAL	1	BXL1520

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### Metals Analysis

<b>BCL Sample ID:</b> 1428700-03	<b>Client Sample Name:</b> EFF-006, EFF-006, 12/2/2014 9:45:00AM, David Walter							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	1.5	ug/L	0.20	0.055	EPA-218.6	ND		1
Total Recoverable Nickel	890	ug/L	4.0	0.38	EPA-200.8	ND	A10	2
Total Recoverable Selenium	26	ug/L	4.0	0.38	EPA-200.8	ND	A10	2
Total Recoverable Thallium	3.2	ug/L	2.0	0.20	EPA-200.8	ND	A10	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-218.6	12/05/14	12/05/14 15:34	OLH	IC-4	1	BXL0638
2	EPA-200.8	12/10/14	12/10/14 23:02	EAR	PE-EL2	2	BXL0992

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### EPA Method 1664

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BXL1387</b>						
Oil and Grease	BXL1387-BLK1	ND	mg/L	5.0	1.2	

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BXL1387</b>										
Oil and Grease	BXL1387-BS1	LCS	34.450	39.700	mg/L	86.8		78	114	

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**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BXL1387</b>		Used client sample: N									
Oil and Grease	DUP	1428224-21	ND	ND		mg/L			18		
	MS	1428224-21	ND	33.700	39.700	mg/L		84.9		78 - 114	
	MSD	1428224-21	ND	32.100	39.700	mg/L	4.9	80.9	18	78 - 114	

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**Project Manager:** George Wegmann

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BXL0471</b>						
Total Sulfide	BXL0471-BLK1	ND	mg/L	0.10	0.050	
<b>QC Batch ID: BXL0474</b>						
Hardness as CaCO3	BXL0474-BLK1	ND	mg/L	0.50	0.10	
<b>QC Batch ID: BXL0723</b>						
Total Dissolved Solids @ 180 C	BXL0723-BLK1	ND	mg/L	6.7	6.7	
<b>QC Batch ID: BXL0753</b>						
Total Suspended Solids (Glass Fiber)	BXL0753-BLK1	ND	mg/L	0.50	0.50	
<b>QC Batch ID: BXL0754</b>						
Total Suspended Solids (Glass Fiber)	BXL0754-BLK1	ND	mg/L	0.50	0.50	
<b>QC Batch ID: BXL0989</b>						
Total Recoverable Calcium	BXL0989-BLK1	ND	mg/L	0.10	0.014	
Total Recoverable Magnesium	BXL0989-BLK1	ND	mg/L	0.050	0.019	
<b>QC Batch ID: BXL1036</b>						
Chloride	BXL1036-BLK1	ND	mg/L	0.50	0.061	

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BXL0471</b>										
Total Sulfide	BXL0471-BS1	LCS	0.51362	0.50000	mg/L	103		90 - 110		
<b>QC Batch ID: BXL0723</b>										
Total Dissolved Solids @ 180 C	BXL0723-BS1	LCS	545.00	586.00	mg/L	93.0		90 - 110		
<b>QC Batch ID: BXL0989</b>										
Total Recoverable Calcium	BXL0989-BS1	LCS	10.301	10.000	mg/L	103		85 - 115		
Total Recoverable Magnesium	BXL0989-BS1	LCS	11.287	10.000	mg/L	113		85 - 115		
<b>QC Batch ID: BXL1036</b>										
Chloride	BXL1036-BS1	LCS	51.881	50.000	mg/L	104		90 - 110		

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Reported: 12/23/2014 14:18  
Project: Lehigh NPDES  
Project Number: 063-7109-916  
Project Manager: George Wegmann

### Water Analysis (General Chemistry)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BXL0471</b>		Used client sample: N								
Total Sulfide	DUP	1428509-11	ND	ND		mg/L			10	
	MS	1428509-11	ND	0.43632	0.50000	mg/L		87.3		80 - 120
	MSD	1428509-11	ND	0.44137	0.50000	mg/L	1.2	88.3	10	80 - 120
<b>QC Batch ID: BXL0723</b>		Used client sample: N								
Total Dissolved Solids @ 180 C	DUP	1428663-01	26000	26300		mg/L	1.1		10	
<b>QC Batch ID: BXL0753</b>		Used client sample: N								
Total Suspended Solids (Glass Fiber)	DUP	1428675-02	2900.0	2640.0		mg/L	9.4		10	
<b>QC Batch ID: BXL0754</b>		Used client sample: Y - Description: SW-2, 12/02/2014 08:51								
Total Suspended Solids (Glass Fiber)	DUP	1428732-02	921.82	1000.0		mg/L	8.1		10	
<b>QC Batch ID: BXL0989</b>		Used client sample: N								
Total Recoverable Calcium	DUP	1429136-01	240.45	235.32		mg/L	2.2		20	
	MS	1429136-01	240.45	241.72	10.000	mg/L		12.7		75 - 125 A03
	MSD	1429136-01	240.45	234.73	10.000	mg/L	2.9	-57.2	20	75 - 125 A03
Total Recoverable Magnesium	DUP	1429136-01	92.274	91.788		mg/L	0.5		20	
	MS	1429136-01	92.274	99.866	10.000	mg/L		75.9		75 - 125
	MSD	1429136-01	92.274	97.276	10.000	mg/L	2.6	50.0	20	75 - 125 A03
<b>QC Batch ID: BXL1036</b>		Used client sample: N								
Chloride	DUP	1429326-01	1.4950	1.5140		mg/L	1.3		10	
	MS	1429326-01	1.4950	53.219	50.505	mg/L		102		80 - 120
	MSD	1429326-01	1.4950	53.315	50.505	mg/L	0.2	103	10	80 - 120
<b>QC Batch ID: BXL1520</b>		Used client sample: N								
Settleable Solids	DUP	1428677-05	ND	ND		ml/L-hr			10	

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**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BXL0638</b>						
Hexavalent Chromium	BXL0638-BLK1	ND	ug/L	0.20	0.055	
<b>QC Batch ID: BXL0992</b>						
Total Recoverable Nickel	BXL0992-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Selenium	BXL0992-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Thallium	BXL0992-BLK1	ND	ug/L	1.0	0.10	

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### Metals Analysis

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BXL0638</b>										
Hexavalent Chromium	BXL0638-BS1	LCS	20.603	20.000	ug/L	103		90 - 110		
<b>QC Batch ID: BXL0992</b>										
Total Recoverable Nickel	BXL0992-BS1	LCS	108.75	100.00	ug/L	109		85 - 115		
Total Recoverable Selenium	BXL0992-BS1	LCS	105.71	100.00	ug/L	106		85 - 115		
Total Recoverable Thallium	BXL0992-BS1	LCS	40.087	40.000	ug/L	100		85 - 115		

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**Project Manager:** George Wegmann

### Metals Analysis

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BXL0638</b>		Used client sample: Y - Description: EFF-005, 12/02/2014 07:45									
Hexavalent Chromium	DUP	1428700-01	24.608	24.308		ug/L	1.2		10		
	MS	1428700-01	24.608	45.607	20.202	ug/L		104		90 - 110	
	MSD	1428700-01	24.608	45.267	20.202	ug/L	0.7	102	10	90 - 110	
<b>QC Batch ID: BXL0992</b>		Used client sample: Y - Description: EFF-001, 12/02/2014 14:00									
Total Recoverable Nickel	DUP	1428700-07	13.622	13.300		ug/L	2.4		20		
	MS	1428700-07	13.622	116.09	100.00	ug/L		102		70 - 130	
	MSD	1428700-07	13.622	113.41	100.00	ug/L	2.3	99.8	20	70 - 130	
Total Recoverable Selenium	DUP	1428700-07	6.8440	5.8670		ug/L	15.4		20		
	MS	1428700-07	6.8440	107.40	100.00	ug/L		101		70 - 130	
	MSD	1428700-07	6.8440	104.81	100.00	ug/L	2.4	98.0	20	70 - 130	
Total Recoverable Thallium	DUP	1428700-07	ND	ND		ug/L			20		
	MS	1428700-07	ND	42.520	40.000	ug/L		106		70 - 130	
	MSD	1428700-07	ND	41.008	40.000	ug/L	3.6	103	20	70 - 130	

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2218 Railroad Avenue voice 530.243.7234  
Redding, California 96001 fax 530.243.7494

3860 Morrow Lane, Suite F voice 530.894.8966  
Chico, California 95928 fax 530.894.5143

December 16, 2014

**Lab ID: 14L0474**

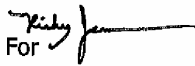
VANESSA SANDOVAL  
B C LABORATORIES INCORPORATED  
4100 ATLAS COURT  
BAKERSFIELD, CA 93308  
RE: HG 1631 TESTING 1428700

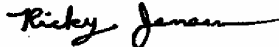
Dear VANESSA SANDOVAL ,

Enclosed are the analysis results for Work Order number 14L0474. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

  
For



Ricky D. Jensen  
Laboratory Director

California ELAP Certification Number 1677



# Laboratories, Inc.

Environmental Testing Laboratory Since 1949



basic laboratory

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3860 Morrow Lane, Suite F Chico, California 95928 voice 530.894.8966 fax 530.894.5143

**Report To:** B C LABORATORIES INCORPORATED  
4100 ATLAS COURT  
BAKERSFIELD, CA 93308  
**Attention:** VANESSA SANDOVAL  
**Project:** HG 1631 TESTING 1428700

**Lab No:** 14L0474  
**Reported:** 12/16/14  
**Phone:** (661) 327-4911  
**P.O. #**

### Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
<b>1428700-01 Water (14L0474-01)</b>		<b>Sampled:12/02/14 07:45</b>							
		<b>Received:12/09/14 13:16 Temp (C): 9.3</b>							
Mercury	ng/l	436	QC-08	1.00	2.50	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-02 FIELD BLANK Blank (14L0474-02)</b>		<b>Sampled:12/03/14 07:45</b>							
		<b>Received:12/09/14 13:16 Temp (C): 10.0</b>							
Mercury Field Blank	ng/l	0.25	J	0.20	0.50	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-03 Water (14L0474-03)</b>		<b>Sampled:12/02/14 09:45</b>							
		<b>Received:12/09/14 13:16 Temp (C): 7.4</b>							
Mercury	ng/l	2470		10.0	25.0	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-04 Water (14L0474-04)</b>		<b>Sampled:12/02/14 11:00</b>							
		<b>Received:12/09/14 13:16 Temp (C): 8.4</b>							
Mercury	ng/l	49.6	QC-08, R-08	1.00	2.50	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-05 Water (14L0474-05)</b>		<b>Sampled:12/02/14 10:25</b>							
		<b>Received:12/09/14 13:16 Temp (C): 8.6</b>							
Mercury	ng/l	35.5		0.20	0.50	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-06 Water (14L0474-06)</b>		<b>Sampled:12/02/14 11:30</b>							
		<b>Received:12/09/14 13:16 Temp (C): 8.9</b>							
Mercury	ng/l	94.8	QC-08, R-08	1.00	2.50	EPA 1631E	12/15/14	12/15/14	B4L1066
<b>1428700-07 Water (14L0474-07)</b>		<b>Sampled:12/02/14 14:00</b>							
		<b>Received:12/09/14 13:16 Temp (C): 8.0</b>							
Mercury	ng/l	1.26		0.20	0.50	EPA 1631E	12/15/14	12/15/14	B4L1066


### Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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### Metals - Total

#### Batch B4L1066 - BrCl Digestion

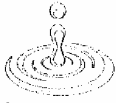
<b>Blank</b>										
Mercury	ND	0.50	ng/l							
<b>Blank</b>										
Mercury	ND	0.50	ng/l							QC-08
<b>Blank</b>										
Mercury	ND	0.50	ng/l							QC-08
<b>LCS</b>										
Mercury	21.6	0.50	ng/l	20.0		108	84.1-120			
<b>Matrix Spike Source: 14L0395-01</b>										
Mercury	22.8	0.50	ng/l	20.0	1.34	107	74.3-125			
<b>Matrix Spike Source: 14L0458-01</b>										
Mercury	134	2.55	ng/l	100	25.2	109	74.3-125			
<b>Matrix Spike Dup Source: 14L0395-01</b>										
Mercury	23.5	0.50	ng/l	20.0	1.34	111	74.3-125	3.27	24	
<b>Matrix Spike Dup Source: 14L0458-01</b>										
Mercury	137	2.55	ng/l	100	25.2	112	74.3-125	2.06	24	

  
Approved by

Basic Laboratory, Inc.  
California ELAP Cert #1677 and #2718

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Chico, California 95928 fax 530.894.5143

**Report To:** B C LABORATORIES INCORPORATED  
4100 ATLAS COURT  
BAKERSFIELD, CA 93308  
**Attention:** VANESSA SANDOVAL  
**Project:** HG 1631 TESTING 1428700

**Lab No:** 14L0474  
**Reported:** 12/16/14  
**Phone:** (661) 327-4911  
**P.O. #**

**Notes and Definitions**

- R-08 The sample was diluted due to sample matrix resulting in elevated reporting limits.
- QC-08 An increased concentration of BrCl was necessary to fully oxidize this sample. As required by EPA 1631E, a laboratory method blank containing the additional BrCl was analyzed with the sample.
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- < Less than reporting limit
- ≤ Less than or equal to reporting limit
- > Greater than reporting limit
- ≥ Greater than or equal to reporting limit
- MDL Method Detection Limit
- RL/ML Minimum Level of Quantitation
- MCL/AL Maximum Contaminant Level/Action Level
- mg/kg Results reported as wet weight
- TTLIC Total Threshold Limit Concentration
- STLC Soluble Threshold Limit Concentration
- TCLP Toxicity Characteristic Leachate Procedure
- Note 1 Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
- Note 2 According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By

Basic Laboratory, Inc.

California ELAP Cert #1677 and #2718



SUBCONTRACT ORDER
BC Laboratories
1428700

1420474
Due 12-16-14

SENDING LABORATORY:

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Vanessa Sandoval

RECEIVING LABORATORY:

Basic Laboratory, Inc.
2218 Railroad Ave.
Redding, CA 96001
James E. Hawley
Phone: 530-243-7234
FAX: ---

1420474

BSCLB

Table with columns: Analysis, Due, Expires, Comments. Contains 7 rows of sample data including Sample ID, Water, Sampled date/time, and temperature readings.

Released By [Signature] Date 12/8/14 Received By [Signature] Date 12-9-14 13:16
Released By [Signature] Date 12/10/14 Received By [Signature] Date 13:42

BSCLB



Golder Associates  
425 Lakeside Drive  
Sunnyvale, CA 94085

**Reported:** 12/23/2014 14:18  
**Project:** Lehigh NPDES  
**Project Number:** 063-7109-916  
**Project Manager:** George Wegmann

**Notes And Definitions**

- MDL Method Detection Limit
- ND Analyte Not Detected at or above the reporting limit
- PQL Practical Quantitation Limit
- RPD Relative Percent Difference
- A03 The sample concentration is more than 4 times the spike level.
- A10 PQL's and MDL's were raised due to matrix interference.