December 12, 2012

Curtis Barnes
Excelsior Mining
2999 N 44th St., Suite 300
Phoenix, AZ 85018

TEL (480) 452-7210
FAX

Work Order No.: 12K0543
Order Name: Gunnison : North Star

RE: Excelsior Mining

Dear Curtis Barnes,

Turner Laboratories, Inc. received 1 sample(s) on 11/19/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 12/12/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

Order: Gunnison : North Star

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12K0543-01	NHS-005	Ground Water	11/19/2012 1330

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

Case Narrative

C4	Confirmatory analysis was past holding time
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 12/12/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Lab Sample ID: 12K0543-01

Client Sample ID: NHS-005
Collection Date/Time: 11/19/2012 1330
Matrix: Ground Water
Order Name: Gunnison : North Star

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
ICP Dissolved Metals-E 200.7								
Aluminum	ND	2.0		mg/L	1	11/27/2012 1645	11/30/2012 1040	RAD
Calcium	53	4.0		mg/L	1	11/27/2012 1645	11/30/2012 1039	RAD
Copper	0.028	0.020		mg/L	1	11/27/2012 1645	11/30/2012 1040	RAD
Iron	ND	0.30		mg/L	1	11/27/2012 1645	11/30/2012 1040	RAD
Magnesium	12	3.0		mg/L	1	11/27/2012 1645	11/30/2012 1039	RAD
Manganese	ND	0.020		mg/L	1	11/27/2012 1645	11/30/2012 1040	RAD
Potassium	ND	5.0		mg/L	1	11/27/2012 1645	11/30/2012 1039	RAD
Sodium	27	5.0		mg/L	1	11/27/2012 1645	11/30/2012 1039	RAD
Zinc	0.70	0.040		mg/L	1	11/27/2012 1645	11/30/2012 1040	RAD
pH-E150.1								
pH (pH Units)	7.3	0.0	H5	-	1	11/27/2012 1515	11/27/2012 1547	AC
Temperature (°C)	17		H5	-	1	11/27/2012 1515	11/27/2012 1547	AC
ICP Total Metals-E200.7								
Aluminum	ND	2.0		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Antimony	ND	0.20		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Arsenic	ND	0.040		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Barium	0.084	0.050		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Beryllium	ND	0.0020		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Cadmium	ND	0.0020		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Calcium	54	4.0		mg/L	1	11/27/2012 1645	11/30/2012 1205	RAD
Chromium	ND	0.030		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Cobalt	ND	0.10		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Iron	ND	0.30		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Lead	ND	0.040		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Magnesium	12	3.0		mg/L	1	11/27/2012 1645	11/30/2012 1205	RAD
Manganese	ND	0.020		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Nickel	ND	0.050		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Potassium	ND	5.0		mg/L	1	11/27/2012 1645	11/30/2012 1205	RAD
Selenium	ND	0.040		mg/L	1	11/27/2012 1645	12/05/2012 1853	RAD
Silver	ND	0.010		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Sodium	26	5.0		mg/L	1	11/27/2012 1645	11/30/2012 1205	RAD
Thallium	ND	0.050		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
Zinc	0.70	0.040		mg/L	1	11/27/2012 1645	11/30/2012 1206	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	0.0010		mg/L	1	12/03/2012 1105	12/03/2012 1525	RAD
Anions by Ion Chromatography-E300								

Turner Laboratories, Inc.

Date: 12/12/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Lab Sample ID: 12K0543-01

Client Sample ID: NHS-005
Collection Date/Time: 11/19/2012 1330
Matrix: Ground Water
Order Name: Gunnison : North Star

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloride	17	1.0		mg/L	1	11/28/2012 1000	11/28/2012 1223	EW
Fluoride	2.0	0.50		mg/L	1	11/28/2012 1000	11/28/2012 1223	EW
Nitrogen, Nitrate (As N)	1.8	1.0	C4	mg/L	1	11/28/2012 1000	11/28/2012 1223	EW
Sulfate	32	10		mg/L	2	11/28/2012 1000	11/28/2012 1259	EW
Calculation-Ion Balance								
Anion	6.09			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Cation	4.83			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Cation/Anion, % Difference	11.5			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Alkalinity-SM2320B								
Alkalinity, Bicarbonate (As CaCO3)	200	2.0		mg/L	1	11/26/2012 1500	11/26/2012 1535	EW
Alkalinity, Carbonate (As CaCO3)	ND	2.0		mg/L	1	11/26/2012 1500	11/26/2012 1535	EW
Alkalinity, Hydroxide (As CaCO3)	ND	2.0		mg/L	1	11/26/2012 1500	11/26/2012 1535	EW
Alkalinity, Total (As CaCO3)	200	2.0		mg/L	1	11/26/2012 1500	11/26/2012 1535	EW
Specific Conductance-SM2510 B								
Conductivity	530	0.10		µmhos/cm	1	11/21/2012 0915	11/21/2012 1325	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	310	20		mg/L	1	11/26/2012 0850	11/27/2012 1525	AC
Silica-SM4500-Si D								
Silica	27	10		mg/L	5	11/30/2012 0930	11/30/2012 1010	AC
Total Organic Carbon-SM5310 C								
Organic Carbon, Total	0.68	0.50		mg/L	1	11/26/2012 1400	11/26/2012 2218	RAD

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211253 - E 200.7										
Blank (1211253-BLK1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	ND	2.0	mg/L							
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Potassium	ND	5.0	mg/L							
Sodium	ND	5.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1211253-BS1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	1.9	2.0	mg/L	2.000		97	85-115			
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Iron	0.92	0.30	mg/L	1.000		92	85-115			
Magnesium	9.5	3.0	mg/L	10.00		95	85-115			
Manganese	0.47	0.020	mg/L	0.5000		95	85-115			
Potassium	9.4	5.0	mg/L	10.00		94	85-115			
Sodium	9.7	5.0	mg/L	10.00		97	85-115			
Zinc	0.48	0.040	mg/L	0.5000		96	85-115			
LCS Dup (1211253-BSD1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	1.9	2.0	mg/L	2.000		97	85-115	0.05	20	
Calcium	9.7	4.0	mg/L	10.00		97	85-115	0.8	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.1	20	
Iron	0.92	0.30	mg/L	1.000		92	85-115	0.2	20	
Magnesium	9.6	3.0	mg/L	10.00		96	85-115	0.7	20	
Manganese	0.47	0.020	mg/L	0.5000		95	85-115	0.2	20	
Potassium	9.5	5.0	mg/L	10.00		95	85-115	0.7	20	
Sodium	9.8	5.0	mg/L	10.00		98	85-115	0.6	20	
Zinc	0.48	0.040	mg/L	0.5000		96	85-115	0.3	20	
Matrix Spike (1211253-MS1)	**Source: 12K0501-03**			Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	2.2	2.0	mg/L	2.000	ND	112	70-130			
Calcium	210	4.0	mg/L	10.00	210	NR	70-130			M3
Copper	0.26	0.020	mg/L	0.2500	0.0020	105	70-130			
Iron	1.2	0.30	mg/L	1.000	0.25	94	70-130			
Magnesium	48	3.0	mg/L	10.00	40	85	70-130			
Manganese	0.49	0.020	mg/L	0.5000	ND	98	70-130			
Potassium	12	5.0	mg/L	10.00	1.6	101	70-130			
Sodium	86	5.0	mg/L	10.00	79	66	70-130			M3
Zinc	0.54	0.040	mg/L	0.5000	0.036	101	70-130			
Batch 1211254 - E200.7										

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211254 - E200.7										
Blank (1211254-BLK1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	ND	2.0	mg/L							
Antimony	ND	0.20	mg/L							
Arsenic	ND	0.040	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0020	mg/L							
Cadmium	ND	0.0020	mg/L							
Calcium	ND	4.0	mg/L							
Chromium	ND	0.030	mg/L							
Cobalt	ND	0.10	mg/L							
Iron	ND	0.30	mg/L							
Lead	ND	0.040	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Nickel	ND	0.050	mg/L							
Potassium	ND	5.0	mg/L							
Selenium	ND	0.040	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	5.0	mg/L							
Thallium	ND	0.050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1211254-BS1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	1.9	2.0	mg/L	2.000		96	85-115			
Antimony	0.43	0.20	mg/L	0.5000		86	85-115			
Arsenic	1.7	0.040	mg/L	2.000		87	85-115			
Barium	1.9	0.050	mg/L	2.000		94	85-115			
Beryllium	0.046	0.0020	mg/L	0.05000		93	85-115			
Cadmium	0.044	0.0020	mg/L	0.05000		88	85-115			
Calcium	9.9	4.0	mg/L	10.00		99	85-115			
Chromium	0.19	0.030	mg/L	0.2000		96	85-115			
Cobalt	0.47	0.10	mg/L	0.5000		94	85-115			
Iron	0.93	0.30	mg/L	1.000		93	85-115			
Lead	0.45	0.040	mg/L	0.5000		91	85-115			
Magnesium	9.7	3.0	mg/L	10.00		97	85-115			
Manganese	0.47	0.020	mg/L	0.5000		95	85-115			
Nickel	0.46	0.050	mg/L	0.5000		93	85-115			
Potassium	9.6	5.0	mg/L	10.00		96	85-115			
Selenium	2.0	0.040	mg/L	2.000		101	85-115			
Silver	0.048	0.010	mg/L	0.05000		96	85-115			
Sodium	9.6	5.0	mg/L	10.00		96	85-115			
Thallium	1.8	0.050	mg/L	2.000		92	85-115			
Zinc	0.46	0.040	mg/L	0.5000		91	85-115			

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211254 - E200.7										
LCS Dup (1211254-BSD1)				Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	1.9	2.0	mg/L	2.000		97	85-115	1	20	
Antimony	0.44	0.20	mg/L	0.5000		87	85-115	1	20	
Arsenic	1.8	0.040	mg/L	2.000		89	85-115	1	20	
Barium	1.9	0.050	mg/L	2.000		95	85-115	0.3	20	
Beryllium	0.047	0.0020	mg/L	0.05000		93	85-115	0.6	20	
Cadmium	0.044	0.0020	mg/L	0.05000		89	85-115	1	20	
Calcium	9.9	4.0	mg/L	10.00		99	85-115	0.3	20	
Chromium	0.19	0.030	mg/L	0.2000		97	85-115	1	20	
Cobalt	0.47	0.10	mg/L	0.5000		95	85-115	0.8	20	
Iron	0.93	0.30	mg/L	1.000		93	85-115	0.2	20	
Lead	0.46	0.040	mg/L	0.5000		92	85-115	1	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	0.3	20	
Manganese	0.48	0.020	mg/L	0.5000		95	85-115	0.3	20	
Nickel	0.47	0.050	mg/L	0.5000		93	85-115	0.7	20	
Potassium	9.6	5.0	mg/L	10.00		96	85-115	0.2	20	
Selenium	1.9	0.040	mg/L	2.000		97	85-115	4	20	
Silver	0.048	0.010	mg/L	0.05000		97	85-115	0.3	20	
Sodium	9.4	5.0	mg/L	10.00		94	85-115	2	20	
Thallium	1.9	0.050	mg/L	2.000		94	85-115	1	20	
Zinc	0.46	0.040	mg/L	0.5000		92	85-115	1	20	
Matrix Spike (1211254-MS1)		**Source: 12K0501-03**		Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	2.2	2.0	mg/L	2.000	ND	110	70-130			
Antimony	0.47	0.20	mg/L	0.5000	ND	94	70-130			
Arsenic	1.9	0.040	mg/L	2.000	0.015	96	70-130			
Barium	1.9	0.050	mg/L	2.000	0.011	94	70-130			
Beryllium	0.047	0.0020	mg/L	0.05000	ND	94	70-130			
Cadmium	0.043	0.0020	mg/L	0.05000	ND	85	70-130			
Calcium	210	4.0	mg/L	10.00	210	8	70-130			M3
Chromium	0.20	0.030	mg/L	0.2000	0.00060	97	70-130			
Cobalt	0.46	0.10	mg/L	0.5000	ND	92	70-130			
Iron	1.6	0.30	mg/L	1.000	0.70	88	70-130			
Lead	0.45	0.040	mg/L	0.5000	ND	91	70-130			
Magnesium	46	3.0	mg/L	10.00	39	73	70-130			
Manganese	0.48	0.020	mg/L	0.5000	0.00052	95	70-130			
Nickel	0.47	0.050	mg/L	0.5000	0.00087	94	70-130			
Potassium	12	5.0	mg/L	10.00	1.6	100	70-130			
Silver	0.053	0.010	mg/L	0.05000	ND	106	70-130			
Sodium	84	5.0	mg/L	10.00	78	56	70-130			M3
Thallium	1.8	0.050	mg/L	2.000	ND	91	70-130			
Zinc	0.52	0.040	mg/L	0.5000	0.033	97	70-130			

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211254 - E200.7										
Matrix Spike (1211254-MS2)		**Source: 12K0638-01**		Prepared: 11/27/2012 Analyzed: 11/30/2012						
Aluminum	2.2	2.0	mg/L	2.000	ND	111	70-130			
Antimony	0.48	0.20	mg/L	0.5000	ND	96	70-130			
Arsenic	2.0	0.040	mg/L	2.000	0.014	99	70-130			
Barium	1.9	0.050	mg/L	2.000	0.016	96	70-130			
Beryllium	0.049	0.0020	mg/L	0.05000	ND	97	70-130			
Cadmium	0.043	0.0020	mg/L	0.05000	ND	87	70-130			
Calcium	210	4.0	mg/L	10.00	200	31	70-130			M3
Chromium	0.20	0.030	mg/L	0.2000	0.00053	100	70-130			
Cobalt	0.47	0.10	mg/L	0.5000	0.00045	94	70-130			
Iron	0.95	0.30	mg/L	1.000	ND	95	70-130			
Lead	0.46	0.040	mg/L	0.5000	ND	92	70-130			
Magnesium	68	3.0	mg/L	10.00	61	73	70-130			
Manganese	0.48	0.020	mg/L	0.5000	ND	97	70-130			
Nickel	0.48	0.050	mg/L	0.5000	0.0032	96	70-130			
Potassium	14	5.0	mg/L	10.00	4.4	97	70-130			
Selenium	2.1	0.040	mg/L	2.000	ND	106	70-130			
Silver	0.057	0.010	mg/L	0.05000	ND	113	70-130			
Sodium	19	5.0	mg/L	10.00	10	86	70-130			
Thallium	1.9	0.050	mg/L	2.000	ND	94	70-130			
Zinc	0.49	0.040	mg/L	0.5000	ND	98	70-130			
Batch 1212008 - E245.1										
Blank (1212008-BLK1)				Prepared & Analyzed: 12/03/2012						
Mercury	ND	0.0010	mg/L							
LCS (1212008-BS1)				Prepared & Analyzed: 12/03/2012						
Mercury	0.0052	0.0010	mg/L	0.005000		105	85-115			
LCS Dup (1212008-BSD1)				Prepared & Analyzed: 12/03/2012						
Mercury	0.0051	0.0010	mg/L	0.005000		102	85-115	2	20	
Matrix Spike (1212008-MS1)		**Source: 12K0001-01**		Prepared & Analyzed: 12/03/2012						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	101	85-115			
Matrix Spike (1212008-MS2)		**Source: 12K0459-01**		Prepared & Analyzed: 12/03/2012						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	101	85-115			
Matrix Spike Dup (1212008-MSD1)		**Source: 12K0001-01**		Prepared & Analyzed: 12/03/2012						
Mercury	0.0052	0.0010	mg/L	0.005000	ND	103	85-115	2	10	
Matrix Spike Dup (1212008-MSD2)		**Source: 12K0459-01**		Prepared & Analyzed: 12/03/2012						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	102	85-115	0.7	10	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211091 - SM5310 C										
Blank (1211091-BLK1)				Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	ND	0.50	mg/L							
LCS (1211091-BS1)				Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	9.6	0.50	mg/L	10.00		96	90-110			
LCS Dup (1211091-BSD1)				Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	9.6	0.50	mg/L	10.00		96	90-110	0.2	10	
Matrix Spike (1211091-MS1)		**Source: 12K0019-02**		Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	110	5.0	mg/L	100.0	13	100	80-120			
Matrix Spike (1211091-MS2)		**Source: 12K0501-03**		Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	11	0.50	mg/L	10.00	1.4	98	80-120			
Matrix Spike Dup (1211091-MSD1)		**Source: 12K0019-02**		Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	100	5.0	mg/L	100.0	13	92	80-120	7	15	
Matrix Spike Dup (1211091-MSD2)		**Source: 12K0501-03**		Prepared & Analyzed: 11/26/2012						
Organic Carbon, Total	11	0.50	mg/L	10.00	1.4	97	80-120	0.8	15	
Batch 1211191 - E150.1										
Duplicate (1211191-DUP1)		**Source: 12K0543-01**		Prepared & Analyzed: 11/27/2012						
pH (pH Units)	7.3	0.0	-		7.3			0.1	200	
Temperature (°C)	17		-		17			0	200	
Batch 1211208 - SM2510 B										
Duplicate (1211208-DUP1)		**Source: 12K0577-01**		Prepared & Analyzed: 11/21/2012						
Conductivity	1400	0.10	µmhos/cm		1400			0.4	10	
Batch 1211221 - SM2320B										
LCS (1211221-BS1)				Prepared & Analyzed: 11/26/2012						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		98	90-110			
LCS Dup (1211221-BSD1)				Prepared & Analyzed: 11/26/2012						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		102	90-110	4	10	
Matrix Spike (1211221-MS1)		**Source: 12K0501-03**		Prepared & Analyzed: 11/26/2012						
Alkalinity, Total (As CaCO3)	520	2.0	mg/L	250.0	270	102	70-130			
Matrix Spike Dup (1211221-MSD1)		**Source: 12K0501-03**		Prepared & Analyzed: 11/26/2012						
Alkalinity, Total (As CaCO3)	510	2.0	mg/L	250.0	270	96	70-130	3	10	
Batch 1211236 - SM2540 C										
Duplicate (1211236-DUP1)		**Source: 12K0543-01**		Prepared: 11/26/2012 Analyzed: 11/27/2012						
Total Dissolved Solids (Residue, Filterable)	300	20	mg/L		310			2	5	
Batch 1211273 - SM4500-Si D										
Blank (1211273-BLK1)				Prepared & Analyzed: 11/30/2012						
Silica	ND	2.0	mg/L							

Turner Laboratories, Inc.

Date: 12/12/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211273 - SM4500-Si D										
LCS (1211273-BS1)				Prepared & Analyzed: 11/30/2012						
Silica	8.1	2.0	mg/L	8.000		102	90-110			
LCS Dup (1211273-BSD1)				Prepared & Analyzed: 11/30/2012						
Silica	8.1	2.0	mg/L	8.000		101	90-110	0.4	20	
Matrix Spike (1211273-MS1)		**Source: 12K0678-01**		Prepared & Analyzed: 11/30/2012						
Silica	100	20	mg/L	80.00	22	101	70-130			
Matrix Spike Dup (1211273-MSD1)		**Source: 12K0678-01**		Prepared & Analyzed: 11/30/2012						
Silica	100	20	mg/L	80.00	22	100	70-130	0.5	20	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12K0543
Date Received: 11/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1211244 - E300										
Blank (1211244-BLK1)				Prepared & Analyzed: 11/28/2012						
Chloride	ND	1.0	mg/L							
Fluoride	ND	0.50	mg/L							
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Sulfate	ND	5.0	mg/L							
LCS (1211244-BS1)				Prepared & Analyzed: 11/28/2012						
Chloride	12	1.0	mg/L	12.50		96	90-110			
Fluoride	1.8	0.50	mg/L	2.000		92	90-110			
Nitrogen, Nitrate (As N)	4.9	1.0	mg/L	5.000		98	90-110			
Sulfate	13	5.0	mg/L	12.50		101	90-110			
LCS Dup (1211244-BSD1)				Prepared & Analyzed: 11/28/2012						
Chloride	12	1.0	mg/L	12.50		96	90-110	0.2	10	
Fluoride	1.8	0.50	mg/L	2.000		92	90-110	0.3	10	
Nitrogen, Nitrate (As N)	4.9	1.0	mg/L	5.000		98	90-110	0.06	10	
Sulfate	13	5.0	mg/L	12.50		100	90-110	0.4	10	
Matrix Spike (1211244-MS1)		**Source: 12K0656-01**		Prepared & Analyzed: 11/28/2012						
Chloride	23	1.0	mg/L	12.50	10	100	80-120			
Nitrogen, Nitrate (As N)	9.8	1.0	mg/L	5.000	4.7	102	80-120			
Sulfate	23	5.0	mg/L	12.50	11	98	80-120			
Matrix Spike (1211244-MS2)		**Source: 12K0655-02**		Prepared & Analyzed: 11/28/2012						
Nitrogen, Nitrate (As N)	8.6	1.0	mg/L	5.000	3.6	102	80-120			
Matrix Spike Dup (1211244-MSD1)		**Source: 12K0656-01**		Prepared & Analyzed: 11/28/2012						
Nitrogen, Nitrate (As N)	9.8	1.0	mg/L	5.000	4.7	103	80-120	0.4	10	
Matrix Spike Dup (1211244-MSD2)		**Source: 12K0655-02**		Prepared & Analyzed: 11/28/2012						
Nitrogen, Nitrate (As N)	8.7	1.0	mg/L	5.000	3.6	102	80-120	0.5	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 12K0543 DATE 11-19-2012 PAGE 1 OF 1

PROJECT NAME Gunnison, North Star # _____
CONTACT NAME Curtis Barnes
COMPANY NAME Excelsior Mining
ADDRESS 2999 N. 44th St Suite 300
PHX, AZ 85018 PHONE 480 452-7110 FAX _____
SAMPLER'S SIGNATURE [signature]

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals ☐ Acids ☐ 625/8270	Volatile Organics 624/524.2/8260	TTHMS ☐	HAA5 ☐	Pesticides ☐ PCBs ☐ 8081 8082	NO_2 ☐ NO_3 ☒	TKN ☐	Oil and Grease Grav. 1664A ☐	VOA ☐	TCLP Analysis Semi-VOA ☐ Pest. ☐	TCLP ☐ Dissolved ☐	Metals Total ☒ RCRA8 ☐	Total ☐ Cyanide Amen. ☐ WAD ☐	SDWA-INORGANICS PRIMARY ☐	MPN ☐ Coliform SECONDARY ☐ Colilert ☐	pH ☒ Cr_6 ☐ Cl_2 ☒	COD ☐ TSS ☐ BOD ☐							
NSH-005	11/19/12	13:30		GW	4										2															

1. RELINQUISHED BY:	2. RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Signature [signature]	Signature	____ Standard (approx. 10 days)*	____ I. Routine Report	Account ____ Y ____ N	
Printed Name Curtis Barnes	Printed Name	____ Next Day ____ 2 Day ____ 5 Day*	____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)	P.O. #	Total Containers 4
Firm Excelsior	Firm	____ Email Preliminary Results To:	____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice	Bill to:	Temperature 4.6
Date/Time 11/19/12 15:52	Date/Time	* Working Days			☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:	4. RECEIVED BY:
Signature	Signature [signature]
Printed Name	Printed Name
Firm	Firm TURNER LABORATORIES, INC.
Date/Time	Date/Time 11-19-12 1552

* LEGEND

DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☐
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☐	Appropriate Head Space ☐
Mail ADEQ Forms: ☐ Yes ☐ No	COC / Labels Agree ☐	Received Within Hold Time ☐

TURNER
LABORATORIES INC.

06/01/2011

QUOTATION for ANALYTICAL SERVICES

Company: Excelsior Mining
Contact: Curtis Barnes
Address: 2999 N 44th St., Suite 300
Company: Phoenix, AZ, 85018
Phone: (720) 226-5527 Fax:

Submitted By: Dawn Weyer

Quote ID:
Project: Excelsior Mining

Expires: 12/30/2013

Test ID		Test	Remarks	# Sample	Unit Price	Test Total
Solid and Chemical Materials						
Nitrate by Ion Chromatography		E300		0	$15.00	$0.00
Ion Balance consists of:						
K by ICP, Dissolved	Alkalinity	Ca by ICP, Dissolved		Chloride by Ion Chromat		
Cu by ICP, Dissolved	Fe by ICP, Dissolved	Al by ICP, Dissolved		Ion Balance Calculation		
Zn by ICP, Dissolved	Mg by ICP, Dissolved	Mn by ICP, Dissolved		Na by ICP, Dissolved		
Nitrate by Ion Chromato	Silica, Dissolved	Sulfate by Ion Chromato		Fluoride by Ion Chromat		
Non-Potable Water						
Al by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Ca by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Cu by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Fe by ICP, Dissolved		E 200.7		0	$8.00	$0.00
K by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Mg by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Mn by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Na by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Nitrate by Ion Chromatography		E300		0	$15.00	$0.00
Silica, Dissolved		SM4500-Si D		0	$15.00	$0.00
Zn by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Ion Balance consists of:						
K by ICP, Dissolved	Alkalinity	Ca by ICP, Dissolved		Chloride by Ion Chromat		
Cu by ICP, Dissolved	Fe by ICP, Dissolved	Al by ICP, Dissolved		Ion Balance Calculation		
Zn by ICP, Dissolved	Mg by ICP, Dissolved	Mn by ICP, Dissolved		Na by ICP, Dissolved		
Nitrate by Ion Chromato	Silica, Dissolved	Sulfate by Ion Chromato		Fluoride by Ion Chromat		
Ground Water						
Ag by ICP, Total		E200.7		5	$8.00	$40.00
Al by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Al by ICP, Total		E200.7		5	$8.00	$40.00
Alkalinity		SM2320B		5	$0.00	$0.00
As by ICP, Total		E200.7		5	$8.00	$40.00
Ba by ICP, Total		E200.7		5	$8.00	$40.00
Be by ICP, Total		E200.7		5	$8.00	$40.00
Ca by ICP, Dissolved		E 200.7		0	$8.00	$0.00
Ca by ICP, Total		E200.7		5	$8.00	$40.00
Cd by ICP, Total		E200.7		5	$8.00	$40.00
Chloride by Ion Chromatography		E300		5	$0.00	$0.00

Approved by: _____ Date: _____
Curtis Barnes

TURNER
LABORATORIES INC.

06/01/2011

QUOTATION for ANALYTICAL SERVICES

Test ID	Test	Remarks	# Sample	Unit Price	Test Total
Co by ICP, Total	E200.7		5	$8.00	$40.00
Conductivity	SM2510 B		5	$15.00	$75.00
Cr by ICP, Total	E200.7		5	$8.00	$40.00
Cu by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Fe by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Fe by ICP, Total	E200.7		5	$8.00	$40.00
Fluoride by Ion Chromatography	E300		5	$0.00	$0.00
Ion Balance	varies		5	$162.00	$810.00
K by ICP, Dissolved	E 200.7		0	$8.00	$0.00
K by ICP, Total	E200.7		5	$8.00	$40.00
Mercury, Total	E245.1		5	$25.00	$125.00
Metals Prep	Prep		5	$10.00	$50.00
Mg by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Mg by ICP, Total	E200.7		5	$8.00	$40.00
Mn by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Mn by ICP, Total	E200.7		5	$8.00	$40.00
Na by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Na by ICP, Total	E200.7		5	$8.00	$40.00
Ni by ICP, Total	E200.7		5	$8.00	$40.00
Nitrate by Ion Chromatography	E300		0	$15.00	$0.00
Organic Carbon, Total	SM5310 C		5	$40.00	$200.00
Pb by ICP, Total	E200.7		5	$8.00	$40.00
pH	E150.1		5	$15.00	$75.00
Sb by ICP, Total	E200.7		5	$8.00	$40.00
Se by ICP, Total	E200.7		5	$8.00	$40.00
Silica, Dissolved	SM4500-Si D		0	$15.00	$0.00
Sulfate by Ion Chromatography	E300		5	$0.00	$0.00
Tl by ICP, Total	E200.7		5	$8.00	$40.00
Total Dissolved Solids	SM2540 C		5	$15.00	$75.00
Zn by ICP, Dissolved	E 200.7		0	$8.00	$0.00
Zn by ICP, Total	E200.7		5	$8.00	$40.00

Ion Balance consists of:

K by ICP, Dissolved	Alkalinity	Ca by ICP, Dissolved	Chloride by Ion Chromat
Cu by ICP, Dissolved	Fe by ICP, Dissolved	Al by ICP, Dissolved	Ion Balance Calculation
Zn by ICP, Dissolved	Mg by ICP, Dissolved	Mn by ICP, Dissolved	Na by ICP, Dissolved
Nitrate by Ion Chromato	Silica, Dissolved	Sulfate by Ion Chromato	Fluoride by Ion Chromat

Drinking Water

Al by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Ca by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Cu by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Fe by ICP, Dissolved	E 200.7	0	$8.00	$0.00
K by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Mg by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Mn by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Na by ICP, Dissolved	E 200.7	0	$8.00	$0.00
Nitrate by Ion Chromatography	E300	0	$15.00	$0.00
Silica, Dissolved	SM4500-Si D	0	$15.00	$0.00
Zn by ICP, Dissolved	E 200.7	0	$8.00	$0.00

Approved by: _____ Date: _____
Curtis Barnes

December 28, 2012

Curtis Barnes
Excelsior Mining
2999 N 44th St., Suite 300
Phoenix, AZ 85018

TEL (480) 452-7210
FAX

Work Order No.: 12L0196
Order Name: Gunnison : North Star

RE: Excelsior Mining

Dear Curtis Barnes,

Turner Laboratories, Inc. received 1 sample(s) on 12/04/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

Order: Gunnison : North Star

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12L0196-01	NSH-004B	Ground Water	12/04/2012 1000

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

Case Narrative

H5 This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Lab Sample ID: 12L0196-01

Client Sample ID: NSH-004B
Collection Date/Time: 12/04/2012 1000
Matrix: Ground Water
Order Name: Gunnison : North Star

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
ICP Dissolved Metals-E 200.7								
Aluminum	ND	2.0		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Calcium	30	4.0		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Copper	ND	0.020		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Iron	0.91	0.30		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Magnesium	15	3.0		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Manganese	ND	0.020		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Potassium	ND	5.0		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Sodium	20	5.0		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
Zinc	0.67	0.040		mg/L	1	12/18/2012 0950	12/18/2012 1815	RAD
pH-E150.1								
pH (pH Units)	7.8	0.0	H5	-	1	12/04/2012 1500	12/04/2012 1525	AC
Temperature (°C)	18			-	1	12/04/2012 1500	12/04/2012 1525	AC
ICP Total Metals-E200.7								
Aluminum	ND	2.0		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Antimony	ND	0.20		mg/L	1	12/06/2012 0830	12/13/2012 0950	RAD
Arsenic	ND	0.040		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Barium	0.053	0.050		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Beryllium	ND	0.0020		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Cadmium	ND	0.0020		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Calcium	32	4.0		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Chromium	ND	0.030		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Cobalt	ND	0.10		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Iron	1.9	0.30		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Lead	ND	0.040		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Magnesium	16	3.0		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Manganese	ND	0.020		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Nickel	ND	0.050		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Potassium	ND	5.0		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Selenium	ND	0.040		mg/L	1	12/06/2012 0830	12/13/2012 0950	RAD
Silver	ND	0.010		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Sodium	21	5.0		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Thallium	ND	0.050		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
Zinc	0.83	0.040		mg/L	1	12/06/2012 0830	12/11/2012 1904	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	0.0010		mg/L	1	12/13/2012 0930	12/13/2012 1436	RAD
Anions by Ion Chromatography-E300								

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Lab Sample ID: 12L0196-01

Client Sample ID: NSH-004B
Collection Date/Time: 12/04/2012 1000
Matrix: Ground Water
Order Name: Gunnison : North Star

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloride	25	2.0		mg/L	2	12/26/2012 1320	12/26/2012 1434	EW
Fluoride	3.9	0.50		mg/L	1	12/04/2012 1030	12/04/2012 1726	EW
Nitrogen, Nitrate (As N)	1.1	1.0		mg/L	1	12/04/2012 1030	12/04/2012 1726	EW
Sulfate	14	5.0		mg/L	1	12/04/2012 1030	12/04/2012 1726	EW
Calculation-Ion Balance								
Anion	5.36			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Cation	3.65			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Cation/Anion, % Difference	18.9			meq/L	1	12/04/2012 1710	12/04/2012 1713	TLG
Alkalinity-SM2320B								
Alkalinity, Bicarbonate (As CaCO3)	150	2.0		mg/L	1	12/06/2012 1500	12/06/2012 1600	EW
Alkalinity, Carbonate (As CaCO3)	ND	2.0		mg/L	1	12/06/2012 1500	12/06/2012 1600	EW
Alkalinity, Hydroxide (As CaCO3)	ND	2.0		mg/L	1	12/06/2012 1500	12/06/2012 1600	EW
Alkalinity, Total (As CaCO3)	150	2.0		mg/L	1	12/06/2012 1500	12/06/2012 1600	EW
Specific Conductance-SM2510 B								
Conductivity	400	0.10		µmhos/cm	1	12/04/2012 1435	12/04/2012 1535	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	250	20		mg/L	1	12/05/2012 1130	12/06/2012 1620	AC
Silica-SM4500-Si D								
Silica	41	20		mg/L	10	12/07/2012 1605	12/07/2012 1640	AC
Total Organic Carbon-SM5310 C								
Organic Carbon, Total	0.53	0.50		mg/L	1	12/07/2012 1107	12/07/2012 1508	AC

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212068 - E200.7										
Blank (1212068-BLK1)				Prepared: 12/06/2012 Analyzed: 12/11/2012						
Aluminum	ND	2.0	mg/L							
Antimony	ND	0.20	mg/L							
Arsenic	ND	0.040	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0020	mg/L							
Cadmium	ND	0.0020	mg/L							
Calcium	ND	4.0	mg/L							
Chromium	ND	0.030	mg/L							
Cobalt	ND	0.10	mg/L							
Iron	ND	0.30	mg/L							
Lead	ND	0.040	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Nickel	ND	0.050	mg/L							
Potassium	ND	5.0	mg/L							
Selenium	ND	0.040	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	5.0	mg/L							
Thallium	ND	0.050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1212068-BS1)				Prepared: 12/06/2012 Analyzed: 12/11/2012						
Aluminum	1.9	2.0	mg/L	2.000		96	85-115			
Antimony	0.51	0.20	mg/L	0.5000		102	85-115			
Arsenic	1.83	0.040	mg/L	2.000		91	85-115			
Barium	1.9	0.050	mg/L	2.000		94	85-115			
Beryllium	0.048	0.0020	mg/L	0.05000		95	85-115			
Cadmium	0.044	0.0020	mg/L	0.05000		89	85-115			
Calcium	9.8	4.0	mg/L	10.00		98	85-115			
Chromium	0.19	0.030	mg/L	0.2000		94	85-115			
Cobalt	0.47	0.10	mg/L	0.5000		93	85-115			
Iron	0.97	0.30	mg/L	1.000		97	85-115			
Lead	0.44	0.040	mg/L	0.5000		89	85-115			
Magnesium	9.7	3.0	mg/L	10.00		97	85-115			
Manganese	0.48	0.020	mg/L	0.5000		96	85-115			
Nickel	0.46	0.050	mg/L	0.5000		93	85-115			
Potassium	9.6	5.0	mg/L	10.00		96	85-115			
Selenium	1.8	0.040	mg/L	2.000		91	85-115			
Silver	0.050	0.010	mg/L	0.05000		100	85-115			
Sodium	9.4	5.0	mg/L	10.00		94	85-115			
Thallium	1.9	0.050	mg/L	2.000		93	85-115			
Zinc	0.45	0.040	mg/L	0.5000		90	85-115			

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212068 - E200.7										
LCS Dup (1212068-BSD1)				Prepared: 12/06/2012 Analyzed: 12/11/2012						
Aluminum	1.9	2.0	mg/L	2.000		97	85-115	1	20	
Antimony	0.50	0.20	mg/L	0.5000		100	85-115	2	20	
Arsenic	1.86	0.040	mg/L	2.000		93	85-115	2	20	
Barium	1.9	0.050	mg/L	2.000		95	85-115	1	20	
Beryllium	0.048	0.0020	mg/L	0.05000		96	85-115	0.5	20	
Cadmium	0.045	0.0020	mg/L	0.05000		90	85-115	1	20	
Calcium	9.9	4.0	mg/L	10.00		99	85-115	1	20	
Chromium	0.19	0.030	mg/L	0.2000		95	85-115	0.9	20	
Cobalt	0.47	0.10	mg/L	0.5000		94	85-115	0.9	20	
Iron	0.98	0.30	mg/L	1.000		98	85-115	0.9	20	
Lead	0.45	0.040	mg/L	0.5000		90	85-115	1	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	1	20	
Manganese	0.49	0.020	mg/L	0.5000		97	85-115	1	20	
Nickel	0.47	0.050	mg/L	0.5000		94	85-115	1	20	
Potassium	9.8	5.0	mg/L	10.00		98	85-115	1	20	
Selenium	1.9	0.040	mg/L	2.000		93	85-115	2	20	
Silver	0.051	0.010	mg/L	0.05000		101	85-115	0.9	20	
Sodium	9.4	5.0	mg/L	10.00		94	85-115	0.07	20	
Thallium	1.9	0.050	mg/L	2.000		95	85-115	1	20	
Zinc	0.46	0.040	mg/L	0.5000		91	85-115	2	20	
Matrix Spike (1212068-MS1)		**Source: 12K0526-01**		Prepared: 12/06/2012 Analyzed: 12/11/2012						
Aluminum	2.1	2.0	mg/L	2.000	0.066	103	70-130			
Arsenic	1.83	0.040	mg/L	2.000	0.00899	91	70-130			
Barium	1.9	0.050	mg/L	2.000	0.13	89	70-130			
Beryllium	0.045	0.0020	mg/L	0.05000	ND	89	70-130			
Cadmium	0.040	0.0020	mg/L	0.05000	ND	81	70-130			
Calcium	54	4.0	mg/L	10.00	44	96	70-130			
Chromium	0.18	0.030	mg/L	0.2000	0.0013	90	70-130			
Cobalt	0.44	0.10	mg/L	0.5000	0.0018	88	70-130			
Iron	1.3	0.30	mg/L	1.000	0.33	96	70-130			
Lead	0.41	0.040	mg/L	0.5000	ND	83	70-130			
Magnesium	17	3.0	mg/L	10.00	7.3	98	70-130			
Manganese	0.57	0.020	mg/L	0.5000	0.10	94	70-130			
Nickel	0.46	0.050	mg/L	0.5000	0.0041	90	70-130			
Potassium	17	5.0	mg/L	10.00	7.4	97	70-130			
Selenium	1.7	0.040	mg/L	2.000	ND	86	70-130			
Silver	0.045	0.010	mg/L	0.05000	ND	90	70-130			
Sodium	81	5.0	mg/L	10.00	72	90	70-130			
Thallium	1.7	0.050	mg/L	2.000	0.0048	85	70-130			
Zinc	0.51	0.040	mg/L	0.5000	0.036	96	70-130			

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212068 - E200.7										
Matrix Spike (1212068-MS2)		**Source: 12L0009-01**		Prepared: 12/06/2012 Analyzed: 12/11/2012						
Aluminum	2.4	2.0	mg/L	2.000	0.17	111	70-130			
Arsenic	1.91	0.040	mg/L	2.000	0.0109	95	70-130			
Barium	1.8	0.050	mg/L	2.000	0.11	86	70-130			
Beryllium	0.047	0.0020	mg/L	0.05000	ND	93	70-130			
Cadmium	0.041	0.0020	mg/L	0.05000	ND	82	70-130			
Calcium	130	4.0	mg/L	10.00	120	27	70-130			M3
Chromium	0.19	0.030	mg/L	0.2000	0.0013	95	70-130			
Cobalt	0.46	0.10	mg/L	0.5000	0.0019	91	70-130			
Iron	1.6	0.30	mg/L	1.000	0.76	86	70-130			
Lead	0.42	0.040	mg/L	0.5000	ND	84	70-130			
Magnesium	36	3.0	mg/L	10.00	27	88	70-130			
Manganese	0.51	0.020	mg/L	0.5000	0.058	91	70-130			
Nickel	0.50	0.050	mg/L	0.5000	0.025	95	70-130			
Potassium	36	5.0	mg/L	10.00	28	85	70-130			
Selenium	1.8	0.040	mg/L	2.000	ND	89	70-130			
Silver	0.049	0.010	mg/L	0.05000	ND	99	70-130			
Sodium	130	5.0	mg/L	10.00	120	15	70-130			M3
Thallium	1.7	0.050	mg/L	2.000	0.0036	87	70-130			
Zinc	0.75	0.040	mg/L	0.5000	0.28	94	70-130			
Batch 1212134 - E245.1										
Blank (1212134-BLK1)				Prepared & Analyzed: 12/13/2012						
Mercury	ND	0.0010	mg/L							
LCS (1212134-BS1)				Prepared & Analyzed: 12/13/2012						
Mercury	0.0054	0.0010	mg/L	0.005000		108	85-115			
LCS Dup (1212134-BSD1)				Prepared & Analyzed: 12/13/2012						
Mercury	0.0053	0.0010	mg/L	0.005000		106	85-115	1	20	
Matrix Spike (1212134-MS1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/13/2012						
Mercury	0.0052	0.0010	mg/L	0.005000	ND	104	85-115			
Matrix Spike (1212134-MS2)		**Source: 12L0273-01**		Prepared & Analyzed: 12/13/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	99	85-115			
Matrix Spike Dup (1212134-MSD1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/13/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	100	85-115	4	10	
Matrix Spike Dup (1212134-MSD2)		**Source: 12L0273-01**		Prepared & Analyzed: 12/13/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	100	85-115	1	10	
Batch 1212180 - E 200.7										

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212180 - E 200.7										
Blank (1212180-BLK1)				Prepared & Analyzed: 12/18/2012						
Aluminum	ND	2.0	mg/L							
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Potassium	ND	5.0	mg/L							
Sodium	ND	5.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1212180-BS1)				Prepared & Analyzed: 12/18/2012						
Aluminum	1.9	2.0	mg/L	2.000		96	85-115			
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		97	85-115			
Iron	0.97	0.30	mg/L	1.000		97	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Manganese	0.50	0.020	mg/L	0.5000		100	85-115			
Potassium	9.6	5.0	mg/L	10.00		96	85-115			
Sodium	9.5	5.0	mg/L	10.00		95	85-115			
Zinc	0.46	0.040	mg/L	0.5000		93	85-115			
LCS Dup (1212180-BSD1)				Prepared & Analyzed: 12/18/2012						
Aluminum	1.9	2.0	mg/L	2.000		95	85-115	0.9	20	
Calcium	9.7	4.0	mg/L	10.00		97	85-115	0.4	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.6	20	
Iron	0.96	0.30	mg/L	1.000		96	85-115	0.9	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	1	20	
Manganese	0.49	0.020	mg/L	0.5000		99	85-115	1	20	
Potassium	9.7	5.0	mg/L	10.00		97	85-115	0.9	20	
Sodium	9.4	5.0	mg/L	10.00		94	85-115	1	20	
Zinc	0.46	0.040	mg/L	0.5000		91	85-115	1	20	
Matrix Spike (1212180-MS1)	**Source: 12L0196-01**			Prepared & Analyzed: 12/18/2012						
Aluminum	2.1	2.0	mg/L	2.000	ND	107	70-130			
Calcium	39	4.0	mg/L	10.00	30	90	70-130			
Copper	0.26	0.020	mg/L	0.2500	0.0075	100	70-130			
Iron	1.9	0.30	mg/L	1.000	0.91	100	70-130			
Magnesium	25	3.0	mg/L	10.00	15	101	70-130			
Manganese	0.50	0.020	mg/L	0.5000	0.010	99	70-130			
Potassium	12	5.0	mg/L	10.00	2.2	95	70-130			
Sodium	29	5.0	mg/L	10.00	20	92	70-130			
Zinc	1.1	0.040	mg/L	0.5000	0.67	91	70-130			

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212037 - SM2510 B										
Duplicate (1212037-DUP1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/04/2012						
Conductivity	400	0.10	µmhos/cm		400			0	10	
Batch 1212049 - E150.1										
Duplicate (1212049-DUP1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/04/2012						
pH (pH Units)	7.9	0.0	-		7.8			0.3	200	
Temperature (°C)	18		-		18			0.6	200	
Batch 1212074 - SM2540 C										
Duplicate (1212074-DUP1)		**Source: 12L0009-02**		Prepared: 12/05/2012 Analyzed: 12/06/2012						
Total Dissolved Solids (Residue, Filterable)	880	20	mg/L		880			0.6	5	
Batch 1212080 - SM2320B										
LCS (1212080-BS1)				Prepared & Analyzed: 12/06/2012						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		101	90-110			
LCS Dup (1212080-BSD1)				Prepared & Analyzed: 12/06/2012						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110	2	10	
Matrix Spike (1212080-MS1)		**Source: 12K0638-01**		Prepared & Analyzed: 12/06/2012						
Alkalinity, Total (As CaCO3)	400	2.0	mg/L	250.0	160	96	70-130			
Matrix Spike Dup (1212080-MSD1)		**Source: 12K0638-01**		Prepared & Analyzed: 12/06/2012						
Alkalinity, Total (As CaCO3)	400	2.0	mg/L	250.0	160	98	70-130	1	10	
Batch 1212083 - SM5310 C										
Blank (1212083-BLK1)				Prepared & Analyzed: 12/07/2012						
Organic Carbon, Total	ND	0.50	mg/L							
LCS (1212083-BS1)				Prepared & Analyzed: 12/07/2012						
Organic Carbon, Total	9.4	0.50	mg/L	10.00		94	90-110			
LCS Dup (1212083-BSD1)				Prepared & Analyzed: 12/07/2012						
Organic Carbon, Total	9.4	0.50	mg/L	10.00		94	90-110	0.2	10	
Matrix Spike (1212083-MS1)		**Source: 12L0009-02**		Prepared & Analyzed: 12/07/2012						
Organic Carbon, Total	120	5.0	mg/L	100.0	16	99	80-120			
Matrix Spike Dup (1212083-MSD1)		**Source: 12L0009-02**		Prepared & Analyzed: 12/07/2012						
Organic Carbon, Total	120	5.0	mg/L	100.0	16	100	80-120	0.3	15	
Batch 1212110 - SM4500-Si D										
Blank (1212110-BLK1)				Prepared & Analyzed: 12/07/2012						
Silica	ND	2.0	mg/L							
LCS (1212110-BS1)				Prepared & Analyzed: 12/07/2012						
Silica	8.0	2.0	mg/L	8.000		101	90-110			
LCS Dup (1212110-BSD1)				Prepared & Analyzed: 12/07/2012						
Silica	7.8	2.0	mg/L	8.000		98	90-110	2	20	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212110 - SM4500-Si D										
Matrix Spike (1212110-MS1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/07/2012						
Silica	120	20	mg/L	80.00	41	97	70-130			
Matrix Spike Dup (1212110-MSD1)		**Source: 12L0196-01**		Prepared & Analyzed: 12/07/2012						
Silica	120	20	mg/L	80.00	41	96	70-130	1	20	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212028 - E300										
Blank (1212028-BLK1)				Prepared & Analyzed: 12/04/2012						
Chloride	ND	1.0	mg/L							
Fluoride	ND	0.50	mg/L							
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Sulfate	ND	5.0	mg/L							
LCS (1212028-BS1)				Prepared & Analyzed: 12/04/2012						
Chloride	12	1.0	mg/L	12.50		98	90-110			
Fluoride	2.1	0.50	mg/L	2.000		105	90-110			
Nitrogen, Nitrate (As N)	5.0	1.0	mg/L	5.000		100	90-110			
Sulfate	13	5.0	mg/L	12.50		103	90-110			
LCS Dup (1212028-BSD1)				Prepared & Analyzed: 12/04/2012						
Chloride	12	1.0	mg/L	12.50		99	90-110	0.6	10	
Fluoride	2.1	0.50	mg/L	2.000		104	90-110	0.6	10	
Nitrogen, Nitrate (As N)	5.0	1.0	mg/L	5.000		100	90-110	0.02	10	
Sulfate	13	5.0	mg/L	12.50		103	90-110	0.09	10	
Matrix Spike (1212028-MS1)		**Source: 12L0134-02**		Prepared & Analyzed: 12/04/2012						
Chloride	22	1.0	mg/L	12.50	8.8	102	80-120			
Nitrogen, Nitrate (As N)	6.2	1.0	mg/L	5.000	1.3	98	80-120			
Matrix Spike (1212028-MS2)		**Source: 12L0143-01**		Prepared & Analyzed: 12/04/2012						
Chloride	15	1.0	mg/L	12.50	3.0	96	80-120			
Nitrogen, Nitrate (As N)	5.2	1.0	mg/L	5.000	0.45	96	80-120			
Sulfate	14	5.0	mg/L	12.50	1.5	98	80-120			
Matrix Spike (1212028-MS3)		**Source: 12L0009-02**		Prepared & Analyzed: 12/04/2012						
Fluoride	2.6	0.50	mg/L	2.000	0.74	92	80-120			
Nitrogen, Nitrate (As N)	5.4	1.0	mg/L	5.000	0.41	100	80-120			
Matrix Spike Dup (1212028-MSD1)		**Source: 12L0134-02**		Prepared & Analyzed: 12/04/2012						
Chloride	21	1.0	mg/L	12.50	8.8	102	80-120	0.3	10	
Nitrogen, Nitrate (As N)	6.2	1.0	mg/L	5.000	1.3	98	80-120	0.4	10	
Matrix Spike Dup (1212028-MSD2)		**Source: 12L0143-01**		Prepared & Analyzed: 12/04/2012						
Chloride	15	1.0	mg/L	12.50	3.0	95	80-120	0.6	10	
Nitrogen, Nitrate (As N)	5.2	1.0	mg/L	5.000	0.45	95	80-120	0.3	10	
Sulfate	14	5.0	mg/L	12.50	1.5	98	80-120	0.3	10	
Matrix Spike Dup (1212028-MSD3)		**Source: 12L0009-02**		Prepared & Analyzed: 12/04/2012						
Fluoride	2.6	0.50	mg/L	2.000	0.74	94	80-120	2	10	
Nitrogen, Nitrate (As N)	5.4	1.0	mg/L	5.000	0.41	101	80-120	1	10	
Batch 1212254 - E300										
Blank (1212254-BLK1)				Prepared & Analyzed: 12/26/2012						
Chloride	ND	1.0	mg/L							
LCS (1212254-BS1)				Prepared & Analyzed: 12/26/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110			

Turner Laboratories, Inc.

Date: 12/28/2012

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0196
Date Received: 12/04/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212254 - E300										
LCS Dup (1212254-BSD1)				Prepared & Analyzed: 12/26/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110	0.06	10	
Matrix Spike (1212254-MS1)		**Source: 12L0637-01**		Prepared & Analyzed: 12/26/2012						
Chloride	150	1.0	mg/L	12.50	150	35	80-120			M3
Matrix Spike Dup (1212254-MSD1)		**Source: 12L0637-01**		Prepared & Analyzed: 12/26/2012						
Chloride	150	1.0	mg/L	12.50	150	32	80-120	0.3	10	M3

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1210196 DATE _____ PAGE _____ OF _____

PROJECT NAME Gunnison: North Star # _____
CONTACT NAME Curtis Barnes
COMPANY NAME Excelsior Mining
ADDRESS 2999 N. 44th St Suite 300
PHX, AZ 85018 PHONE 480 452 7210 FAX _____
SAMPLER'S SIGNATURE [signature]

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals ☐ Acids ☐ 625/8270	Volatile Organics 624/524.2/8260	TTHMS ☐	HAA5 ☐	Pesticides ☐ PCB's ☐ 8081 8082	NO3 ☒	NO2 ☐	TKN ☐	Oil and Grease Grav. 1664A ☐	VOA ☐	TCLP Analysis Semi-VOA ☐ Pest. ☐	TCLP ☐	Metals Total ☒ Dissolved ☒	RCRA8 ☐	Total ☐	Cyanide Amen. ☐ WAD ☐	SDWA-INORGANICS PRIMARY ☐	SECONDARY ☐	MPN ☐	Coliform Colilert ☐	pH ☒	Cl2 ☐	Cl ☐	COD ☐	TSS ☐	BOD ☐	ALKALINITY, CHLORIDE, CONDUCTIVITY, FLUORIDE	Ion Balance, SULFATE, SILICA	TDS	TOC	
NSH-0043	12/4/12	10 AM		GW							X						X	X								X					X	X	X	X			

1. RELINQUISHED BY:	2. RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Signature: [signature]	Signature:	____ Standard (approx. 10 days)*	____ I. Routine Report	Account ____ Y ____ N	
Printed Name: Curtis Barnes	Printed Name:	____ Next Day ____ 2 Day ____ 5 Day*	____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)	P.O. #	
Firm: Excelsior Mining	Firm:	____ Email Preliminary Results To:	____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice	Bill to:	Total Containers: 4
Date/Time: 12/4/12 13:38	Date/Time:	* Working Days			Temperature: 1.8
					☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:	4. RECEIVED BY:
Signature:	Signature: [signature]
Printed Name:	Printed Name: [signature]
Firm:	Firm: TURNER LABORATORIES, INC.
Date/Time:	Date/Time: 12-4-12 1338

* LEGEND

DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☐
Mail ADEQ Forms: ☐ Yes ☐ No	COC / Labels Agree ☒	Received Within Hold Time ☒

*Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Fe, K, Hg, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, Zn
** Al, Ca, Cu, Fe, K, Mg, Mn, Na, Zn

January 03, 2013

Curtis Barnes
Excelsior Mining
2999 N 44th St., Suite 300
Phoenix, AZ 85018

TEL (480) 452-7210
FAX

Work Order No.: 12L0468
Order Name: Excelsior Mining

RE: Excelsior Mining

Dear Curtis Barnes,

Turner Laboratories, Inc. received 1 sample(s) on 12/12/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

Order: Excelsior Mining

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12L0468-01	NHS-006	Ground Water	12/12/2012 1000

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

Case Narrative

H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Lab Sample ID: 12L0468-01

Client Sample ID: NHS-006
Collection Date/Time: 12/12/2012 1000
Matrix: Ground Water
Order Name: Excelsior Mining

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
ICP Dissolved Metals-E 200.7								
Aluminum	ND	2.0		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Calcium	40	4.0		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Copper	ND	0.020		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Iron	ND	0.30		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Magnesium	12	3.0		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Manganese	0.040	0.020		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Potassium	ND	5.0		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Sodium	29	5.0		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
Zinc	0.94	0.040		mg/L	1	12/18/2012 0950	12/18/2012 1832	RAD
pH-E150.1								
pH (pH Units)	7.5	0.0	H5	-	1	12/12/2012 1515	12/12/2012 1555	AC
Temperature (°C)	18		H5	-	1	12/12/2012 1515	12/12/2012 1555	AC
ICP Total Metals-E200.7								
Aluminum	ND	2.0		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Antimony	ND	0.20		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Arsenic	ND	0.040		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Barium	0.082	0.050		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Beryllium	ND	0.0020		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Cadmium	ND	0.0020		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Calcium	41	4.0		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Chromium	ND	0.030		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Cobalt	ND	0.10		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Iron	ND	0.30		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Lead	ND	0.040		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Magnesium	12	3.0		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Manganese	0.040	0.020		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Nickel	ND	0.050		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Potassium	ND	5.0		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Selenium	ND	0.040		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Silver	ND	0.010		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Sodium	29	5.0		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Thallium	ND	0.050		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
Zinc	1.0	0.040		mg/L	1	12/12/2012 1440	12/13/2012 1345	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	0.0010		mg/L	1	12/20/2012 1250	12/21/2012 1031	RAD
Anions by Ion Chromatography-E300								

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Lab Sample ID: 12L0468-01

Client Sample ID: NHS-006
Collection Date/Time: 12/12/2012 1000
Matrix: Ground Water
Order Name: Excelsior Mining

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloride	26	2.0		mg/L	2	12/13/2012 1130	12/13/2012 1355	EW
Fluoride	2.9	0.50		mg/L	1	12/21/2012 1100	12/21/2012 1525	EW
Nitrogen, Nitrate (As N)	1.5	1.0		mg/L	1	12/12/2012 1000	12/12/2012 1742	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	12/12/2012 1000	12/12/2012 1742	EW
Sulfate	14	5.0		mg/L	1	12/12/2012 1000	12/12/2012 1742	EW
Calculation-Ion Balance								
Anion	5.66			meq/L	1	12/27/2012 1439	12/27/2012 1439	TLG
Cation	4.28			meq/L	1	12/27/2012 1439	12/27/2012 1439	TLG
Cation/Anion, % Difference	13.9			meq/L	1	12/27/2012 1439	12/27/2012 1439	TLG
Alkalinity-SM2320B								
Alkalinity, Bicarbonate (As CaCO3)	170	2.0		mg/L	1	12/18/2012 1515	12/18/2012 1615	EW
Alkalinity, Carbonate (As CaCO3)	ND	2.0		mg/L	1	12/18/2012 1515	12/18/2012 1615	EW
Alkalinity, Hydroxide (As CaCO3)	ND	2.0		mg/L	1	12/18/2012 1515	12/18/2012 1615	EW
Alkalinity, Total (As CaCO3)	170	2.0		mg/L	1	12/18/2012 1515	12/18/2012 1615	EW
Specific Conductance-SM2510 B								
Conductivity	470	0.10		µmhos/cm	1	12/13/2012 0905	12/13/2012 1045	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	280	20		mg/L	1	12/14/2012 0930	12/18/2012 1540	AC
Silica-SM4500-Si D								
Silica	37	10		mg/L	5	12/13/2012 1550	12/13/2012 1620	AC
Total Organic Carbon-SM5310 C								
Organic Carbon, Total	1.9	0.50		mg/L	1	12/14/2012 1210	12/14/2012 1822	AC

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212128 - E200.7										
Blank (1212128-BLK1)				Prepared: 12/12/2012 Analyzed: 12/13/2012						
Aluminum	ND	2.0	mg/L							
Antimony	ND	0.20	mg/L							
Arsenic	ND	0.040	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0020	mg/L							
Cadmium	ND	0.0020	mg/L							
Calcium	ND	4.0	mg/L							
Chromium	ND	0.030	mg/L							
Cobalt	ND	0.10	mg/L							
Iron	ND	0.30	mg/L							
Lead	ND	0.040	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Nickel	ND	0.050	mg/L							
Potassium	ND	5.0	mg/L							
Selenium	ND	0.040	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	5.0	mg/L							
Thallium	ND	0.050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1212128-BS1)				Prepared: 12/12/2012 Analyzed: 12/13/2012						
Aluminum	2.0	2.0	mg/L	2.000		98	85-115			
Antimony	0.50	0.20	mg/L	0.5000		99	85-115			
Arsenic	1.8	0.040	mg/L	2.000		91	85-115			
Barium	1.9	0.050	mg/L	2.000		95	85-115			
Beryllium	0.047	0.0020	mg/L	0.05000		94	85-115			
Cadmium	0.045	0.0020	mg/L	0.05000		90	85-115			
Calcium	10	4.0	mg/L	10.00		100	85-115			
Chromium	0.19	0.030	mg/L	0.2000		96	85-115			
Cobalt	0.46	0.10	mg/L	0.5000		93	85-115			
Iron	1.0	0.30	mg/L	1.000		100	85-115			
Lead	0.45	0.040	mg/L	0.5000		90	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
Manganese	0.49	0.020	mg/L	0.5000		97	85-115			
Nickel	0.47	0.050	mg/L	0.5000		93	85-115			
Potassium	9.8	5.0	mg/L	10.00		98	85-115			
Selenium	1.9	0.040	mg/L	2.000		95	85-115			
Silver	0.050	0.010	mg/L	0.05000		100	85-115			
Sodium	9.9	5.0	mg/L	10.00		99	85-115			
Thallium	1.9	0.050	mg/L	2.000		95	85-115			
Zinc	0.47	0.040	mg/L	0.5000		93	85-115			

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212128 - E200.7										
LCS Dup (1212128-BSD1)				Prepared: 12/12/2012 Analyzed: 12/13/2012						
Aluminum	2.0	2.0	mg/L	2.000		102	85-115	4	20	
Antimony	0.50	0.20	mg/L	0.5000		101	85-115	1	20	
Arsenic	1.9	0.040	mg/L	2.000		93	85-115	1	20	
Barium	1.9	0.050	mg/L	2.000		94	85-115	0.8	20	
Beryllium	0.047	0.0020	mg/L	0.05000		94	85-115	1	20	
Cadmium	0.045	0.0020	mg/L	0.05000		91	85-115	0.3	20	
Calcium	10	4.0	mg/L	10.00		100	85-115	0.06	20	
Chromium	0.19	0.030	mg/L	0.2000		96	85-115	0.009	20	
Cobalt	0.47	0.10	mg/L	0.5000		93	85-115	0.3	20	
Iron	0.99	0.30	mg/L	1.000		99	85-115	0.6	20	
Lead	0.45	0.040	mg/L	0.5000		91	85-115	0.6	20	
Magnesium	10	3.0	mg/L	10.00		101	85-115	0.2	20	
Manganese	0.48	0.020	mg/L	0.5000		96	85-115	2	20	
Nickel	0.47	0.050	mg/L	0.5000		95	85-115	1	20	
Potassium	9.8	5.0	mg/L	10.00		98	85-115	0.2	20	
Selenium	1.9	0.040	mg/L	2.000		97	85-115	2	20	
Silver	0.051	0.010	mg/L	0.05000		103	85-115	3	20	
Sodium	9.8	5.0	mg/L	10.00		98	85-115	1	20	
Thallium	1.9	0.050	mg/L	2.000		96	85-115	0.6	20	
Zinc	0.47	0.040	mg/L	0.5000		95	85-115	2	20	
Matrix Spike (1212128-MS1)		**Source: 12L0468-01**		Prepared: 12/12/2012 Analyzed: 12/13/2012						
Aluminum	2.1	2.0	mg/L	2.000	0.046	101	70-130			
Antimony	0.45	0.20	mg/L	0.5000	ND	91	70-130			
Arsenic	1.9	0.040	mg/L	2.000	0.011	94	70-130			
Barium	1.9	0.050	mg/L	2.000	0.082	92	70-130			
Beryllium	0.047	0.0020	mg/L	0.05000	ND	93	70-130			
Cadmium	0.044	0.0020	mg/L	0.05000	ND	87	70-130			
Calcium	50	4.0	mg/L	10.00	41	84	70-130			
Chromium	0.19	0.030	mg/L	0.2000	0.00072	95	70-130			
Cobalt	0.45	0.10	mg/L	0.5000	ND	90	70-130			
Iron	1.2	0.30	mg/L	1.000	0.18	98	70-130			
Lead	0.43	0.040	mg/L	0.5000	ND	87	70-130			
Magnesium	21	3.0	mg/L	10.00	12	91	70-130			
Manganese	0.50	0.020	mg/L	0.5000	0.040	92	70-130			
Nickel	0.46	0.050	mg/L	0.5000	ND	91	70-130			
Potassium	11	5.0	mg/L	10.00	1.7	93	70-130			
Selenium	2.0	0.040	mg/L	2.000	ND	99	70-130			
Silver	0.041	0.010	mg/L	0.05000	ND	82	70-130			
Sodium	38	5.0	mg/L	10.00	29	82	70-130			
Thallium	1.8	0.050	mg/L	2.000	0.0026	92	70-130			
Zinc	1.4	0.040	mg/L	0.5000	1.0	81	70-130			
Batch 1212180 - E 200.7										

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212180 - E 200.7										
Blank (1212180-BLK1)				Prepared & Analyzed: 12/18/2012						
Aluminum	ND	2.0	mg/L							
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Potassium	ND	5.0	mg/L							
Sodium	ND	5.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1212180-BS1)				Prepared & Analyzed: 12/18/2012						
Aluminum	1.9	2.0	mg/L	2.000		96	85-115			
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		97	85-115			
Iron	0.97	0.30	mg/L	1.000		97	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Manganese	0.50	0.020	mg/L	0.5000		100	85-115			
Potassium	9.6	5.0	mg/L	10.00		96	85-115			
Sodium	9.5	5.0	mg/L	10.00		95	85-115			
Zinc	0.46	0.040	mg/L	0.5000		93	85-115			
LCS Dup (1212180-BSD1)				Prepared & Analyzed: 12/18/2012						
Aluminum	1.9	2.0	mg/L	2.000		95	85-115	0.9	20	
Calcium	9.7	4.0	mg/L	10.00		97	85-115	0.4	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.6	20	
Iron	0.96	0.30	mg/L	1.000		96	85-115	0.9	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	1	20	
Manganese	0.49	0.020	mg/L	0.5000		99	85-115	1	20	
Potassium	9.7	5.0	mg/L	10.00		97	85-115	0.9	20	
Sodium	9.4	5.0	mg/L	10.00		94	85-115	1	20	
Zinc	0.46	0.040	mg/L	0.5000		91	85-115	1	20	
Matrix Spike (1212180-MS1)	**Source: 12L0196-01**			Prepared & Analyzed: 12/18/2012						
Aluminum	2.1	2.0	mg/L	2.000	ND	107	70-130			
Calcium	39	4.0	mg/L	10.00	30	90	70-130			
Copper	0.26	0.020	mg/L	0.2500	0.0075	100	70-130			
Iron	1.9	0.30	mg/L	1.000	0.91	100	70-130			
Magnesium	25	3.0	mg/L	10.00	15	101	70-130			
Manganese	0.50	0.020	mg/L	0.5000	0.010	99	70-130			
Potassium	12	5.0	mg/L	10.00	2.2	95	70-130			
Sodium	29	5.0	mg/L	10.00	20	92	70-130			
Zinc	1.1	0.040	mg/L	0.5000	0.67	91	70-130			
Batch 1212223 - E245.1										
Blank (1212223-BLK1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	ND	0.0010	mg/L							
LCS (1212223-BS1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0051	0.0010	mg/L	0.005000		103	85-115			

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212223 - E245.1										
LCS Dup (1212223-BSD1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0052	0.0010	mg/L	0.005000		103	85-115	0.7	20	
Matrix Spike (1212223-MS1)		**Source: 12L0468-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	85-115			
Matrix Spike (1212223-MS2)		**Source: 12L0563-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0048	0.0010	mg/L	0.005000	0.000090	95	85-115			
Matrix Spike Dup (1212223-MSD1)		**Source: 12L0468-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	100	85-115	0.9	10	
Matrix Spike Dup (1212223-MSD2)		**Source: 12L0563-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	0.0050	0.0010	mg/L	0.005000	0.000090	97	85-115	2	10	

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212136 - SM2510 B										
Duplicate (1212136-DUP1)		**Source: 12L0468-01**		Prepared & Analyzed: 12/13/2012						
Conductivity	470	0.10	µmhos/cm		470			1	10	
Batch 1212146 - E150.1										
Duplicate (1212146-DUP1)		**Source: 12L0450-01**		Prepared & Analyzed: 12/12/2012						
pH (pH Units)	8.6	0.0	-		8.6			0.1	200	
Temperature (°C)	20		-		20			0.5	200	
Batch 1212157 - SM2540 C										
Duplicate (1212157-DUP1)		**Source: 12L0449-01**		Prepared: 12/14/2012 Analyzed: 12/18/2012						
Total Dissolved Solids (Residue, Filterable)	270	20	mg/L		260			3	5	
Batch 1212159 - SM5310 C										
Blank (1212159-BLK1)				Prepared & Analyzed: 12/14/2012						
Organic Carbon, Total	ND	0.50	mg/L							
LCS (1212159-BS1)				Prepared & Analyzed: 12/14/2012						
Organic Carbon, Total	9.3	0.50	mg/L	10.00		93	90-110			
LCS Dup (1212159-BSD1)				Prepared & Analyzed: 12/14/2012						
Organic Carbon, Total	9.4	0.50	mg/L	10.00		94	90-110	0.8	10	
Matrix Spike (1212159-MS1)		**Source: 12L0426-06**		Prepared & Analyzed: 12/14/2012						
Organic Carbon, Total	18	0.50	mg/L	10.00	8.8	92	80-120			
Matrix Spike Dup (1212159-MSD1)		**Source: 12L0426-06**		Prepared & Analyzed: 12/14/2012						
Organic Carbon, Total	18	0.50	mg/L	10.00	8.8	94	80-120	1	15	
Batch 1212186 - SM4500-Si D										
Blank (1212186-BLK1)				Prepared & Analyzed: 12/13/2012						
Silica	ND	2.0	mg/L							
LCS (1212186-BS1)				Prepared & Analyzed: 12/13/2012						
Silica	7.8	2.0	mg/L	8.000		98	90-110			
LCS Dup (1212186-BSD1)				Prepared & Analyzed: 12/13/2012						
Silica	7.8	2.0	mg/L	8.000		98	90-110	0.2	20	
Matrix Spike (1212186-MS1)		**Source: 12L0382-01**		Prepared & Analyzed: 12/13/2012						
Silica	79	10	mg/L	40.00	41	96	70-130			
Matrix Spike Dup (1212186-MSD1)		**Source: 12L0382-01**		Prepared & Analyzed: 12/13/2012						
Silica	79	10	mg/L	40.00	41	97	70-130	0.2	20	
Batch 1212189 - SM2320B										
LCS (1212189-BS1)				Prepared & Analyzed: 12/18/2012						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110			
LCS Dup (1212189-BSD1)				Prepared & Analyzed: 12/18/2012						
Alkalinity, Total (As CaCO3)	260	2.0	mg/L	250.0		102	90-110	4	10	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212189 - SM2320B										
Matrix Spike (1212189-MS1)		**Source: 12L0460-01**		Prepared & Analyzed: 12/18/2012						
Alkalinity, Total (As CaCO3)	350	2.0	mg/L	250.0	100	101	70-130			
Matrix Spike Dup (1212189-MSD1)		**Source: 12L0460-01**		Prepared & Analyzed: 12/18/2012						
Alkalinity, Total (As CaCO3)	360	2.0	mg/L	250.0	100	102	70-130	0.6	10	

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212119 - E300										
Blank (1212119-BLK1)				Prepared & Analyzed: 12/12/2012						
Chloride	ND	1.0	mg/L							
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
Sulfate	ND	5.0	mg/L							
LCS (1212119-BS1)				Prepared & Analyzed: 12/12/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110			
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110			
Sulfate	12	5.0	mg/L	12.50		98	90-110			
LCS Dup (1212119-BSD1)				Prepared & Analyzed: 12/12/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110	0.5	10	
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		97	90-110	0.6	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.5	10	
Sulfate	12	5.0	mg/L	12.50		98	90-110	0.5	10	
Matrix Spike (1212119-MS1)		**Source: 12L0445-03**		Prepared & Analyzed: 12/12/2012						
Nitrogen, Nitrate (As N)	6.9	1.0	mg/L	5.000	2.2	95	80-120			
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	83	80-120			
Matrix Spike (1212119-MS2)		**Source: 12L0478-01**		Prepared & Analyzed: 12/12/2012						
Chloride	15	1.0	mg/L	12.50	4.1	91	80-120			
Nitrogen, Nitrate (As N)	5.8	1.0	mg/L	5.000	1.1	93	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	93	80-120			
Sulfate	15	5.0	mg/L	12.50	3.4	91	80-120			
Matrix Spike Dup (1212119-MSD1)		**Source: 12L0445-03**		Prepared & Analyzed: 12/12/2012						
Nitrogen, Nitrate (As N)	6.9	1.0	mg/L	5.000	2.2	95	80-120	0.1	10	
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	82	80-120	0.2	10	
Matrix Spike Dup (1212119-MSD2)		**Source: 12L0478-01**		Prepared & Analyzed: 12/12/2012						
Chloride	16	1.0	mg/L	12.50	4.1	93	80-120	1	10	
Nitrogen, Nitrate (As N)	5.9	1.0	mg/L	5.000	1.1	95	80-120	1	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	95	80-120	2	10	
Sulfate	15	5.0	mg/L	12.50	3.4	92	80-120	0.7	10	
Batch 1212131 - E300										
Blank (1212131-BLK1)				Prepared & Analyzed: 12/13/2012						
Chloride	ND	1.0	mg/L							
LCS (1212131-BS1)				Prepared & Analyzed: 12/13/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110			
LCS Dup (1212131-BSD1)				Prepared & Analyzed: 12/13/2012						
Chloride	12	1.0	mg/L	12.50		95	90-110	0.3	10	
Matrix Spike (1212131-MS1)		**Source: 12L0487-01**		Prepared & Analyzed: 12/13/2012						
Chloride	440	1.0	mg/L	12.50	460	NR	80-120			M3

Turner Laboratories, Inc.

Date: 01/03/2013

Client: Excelsior Mining
Project: Excelsior Mining
Work Order: 12L0468
Date Received: 12/12/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212131 - E300										
Matrix Spike Dup (1212131-MSD1)		**Source: 12L0487-01**		Prepared & Analyzed: 12/13/2012						
Chloride	440	1.0	mg/L	12.50	460	NR	80-120	0.5	10	M3
Batch 1212229 - E300										
Blank (1212229-BLK1)				Prepared & Analyzed: 12/21/2012						
Fluoride	ND	0.50	mg/L							
LCS (1212229-BS1)				Prepared & Analyzed: 12/21/2012						
Fluoride	2.0	0.50	mg/L	2.000		100	90-110			
LCS Dup (1212229-BSD1)				Prepared & Analyzed: 12/21/2012						
Fluoride	2.0	0.50	mg/L	2.000		101	90-110	1	10	
Matrix Spike (1212229-MS1)		**Source: 12L0450-01**		Prepared & Analyzed: 12/21/2012						
Fluoride	2.1	0.50	mg/L	2.000	0.22	93	80-120			
Matrix Spike (1212229-MS2)		**Source: 12L0512-01**		Prepared & Analyzed: 12/21/2012						
Fluoride	2.3	0.50	mg/L	2.000	0.44	94	80-120			
Matrix Spike Dup (1212229-MSD1)		**Source: 12L0450-01**		Prepared & Analyzed: 12/21/2012						
Fluoride	2.1	0.50	mg/L	2.000	0.22	94	80-120	1	10	
Matrix Spike Dup (1212229-MSD2)		**Source: 12L0512-01**		Prepared & Analyzed: 12/21/2012						
Fluoride	2.3	0.50	mg/L	2.000	0.44	95	80-120	0.5	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1210468 DATE _____ PAGE _____ OF _____

PROJECT NAME Garnison: North Star # _____
CONTACT NAME Curtis Barnes
COMPANY NAME Excelsior Mining
ADDRESS 2999 N. 44th St Suite 300
PHX, AZ 85018 PHONE 480 452 7210 FAX _____
SAMPLER'S SIGNATURE Curt Barnes

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals ☐ Acids ☐ 625/8270	Volatile Organics 624/524.2/8260	TTHMS ☐	HAA5 ☐	Pesticides ☐ 8081	PCB's ☐ 8082	NO3 ☐ TKN ☐	Oil and Grease Grav. 1664A ☐	VOA ☐	TCLP Analysis Semi-VOA ☐ Pest. ☐	TCLP ☐	Metals Total ☐ Dissolved ☐	RCRA8 ☐	Total ☐ Cyanide Amen. ☐ WAD ☐	SDWA-INORGANICS PRIMARY ☐	MPN ☐ SECONDARY ☐ Coliform	pH ☐ Coliform ☐	Cr6 ☐ Cl2 ☐	COD ☐ TSS ☐ BOD ☐	ALKALINITY, CHLORIDE	Conductivity, Fluoride	Ion Balance, Sulfate, Silica, TDS	TOC
NSH-006	12/12/12	10AM		GW	4							X				X	X					X			X	X	X	X	

1. RELINQUISHED BY:
Signature Curt Barnes
Printed Name Curtis Barnes
Firm Excelsior Mining Corp
Date/Time 12/12/12 13:15

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To: _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 4
Temperature 6.1
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature _____
Printed Name Steve Lush
Firm TURNER LABORATORIES, INC.
Date/Time 12/12/12 1315

* LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☑
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☑	Appropriate Head Space ☑
Mail ADEQ Forms: ☐ Yes ☐ No	COC / Labels Agree ☑	Received Within Hold Time ☑

*Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Fe, K, Hg, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, Zn
** Al, Ca, Cu, Fe, K, Mg, Mn, Na, Zn

Northern California
ACCUTEST
LABORATORIES

02/03/15

Technical Report for

Excelsior Mining Corporation

Excelsior/Gunnison GW Testing

Accutest Job Number: C38090

Sampling Date: 01/18/15

Report to:

Excelsior Mining Corporation
2999 N. 44th Street Suite 300
Phoenix, AZ 85018
cbarnes@excelsiormining.com; LCandreva@haleyaldrich.com; KBlust@haleyaldrich.com
ATTN: Curtis Barnes

Total number of pages in report: **36**

NELAP ACCREDITED TNI LABORATORY

James J. Rhudy
Lab Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

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Accutest Laboratories

Sample Summary

Excelsior Mining Corporation

Job No: C38090

Excelsior/Gunnison GW Testing

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C38090-1	01/18/15	15:00	LC	01/20/15	AQ	Ground Water	NSH-008-011815
C38090-1F	01/18/15	15:00	LC	01/20/15	AQ	Groundwater Filtered	NSH-008-011815

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Excelsior Mining Corporation	**Job No**	C38090
Site:	Excelsior/Gunnison GW Testing	**Report Date**	2/3/2015 4:32:19 PM

1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 01/18/2015 and were received at Accutest on 01/20/2015 properly preserved, at 1.7 Deg. C and intact. These Samples received an Accutest job number of C38090. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP11571

- Sample(s) C38089-6MS, C38089-6MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP9021

- Sample(s) C38143-1RMS, C38143-1RMSD, C38143-1RSDL were used as the QC samples for metals.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP9017

- Sample(s) C38090-1FMS, C38090-1FMSD, C38090-1FSDL were used as the QC samples for metals.
- MP9017-MB1 > RL for Aluminum, Antimony, Calcium, Nickel: All sample results < RL or > 10x method blank concentration.
- C38090-1F for Antimony, Boron: Elevated RL due to positive bias of Method Blank.
- RPD(s) for Serial Dilution for Aluminum, Arsenic, Cadmium, Chromium, Lead, Selenium, Silver, Thallium, Vanadium are outside control limits for sample MP9017-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- RPD(s) for Serial Dilution for Boron, Copper, Molybdenum are outside control limits for sample MP9017-SD1. Serial dilution indicates possible matrix interference.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP7322

- Sample(s) C38090-1MS, C38090-1MSD were used as the QC samples for Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate.

Wet Chemistry By Method SM2320 B-97

Matrix: AQ **Batch ID:** GN15517

- Sample(s) C38018-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM2510 B-97

Matrix: AQ **Batch ID:** GN15509

- Sample(s) C38079-1DUP were used as the QC samples for Specific Conductivity.

Wet Chemistry By Method SM2540 C-97

Matrix: AQ	Batch ID: GN15508

- Sample(s) C38090-1DUP were used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM4500-CN B,C,E-99

Matrix: AQ	Batch ID: GP7309

- Sample(s) C38027-1MS, C38027-1MSD were used as the QC samples for Cyanide, Total.

Wet Chemistry By Method SM4500-NO3 E-00

Matrix: AQ	Batch ID: R8942

- C38090-1 for Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Wet Chemistry By Method SM4500H+ -00

Matrix: AQ	Batch ID: GN15565

- Sample(s) C38253-1DUP were used as the QC samples for pH.
- The following samples were run outside of holding time for method SM4500H+ -00: C38090-1. This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5

Wet Chemistry By Method SM5310 C-00

Matrix: AQ	Batch ID: GP7305

- Sample(s) C38054-1MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SW846 6010B

Matrix: AQ	Batch ID: R8939

- C38090-1 for Silica, Dissolved: Calculated as: (Silicon * 2.139)

Accutest Laboratories Northern California (ALNCA) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALNCA and as stated on the COC. ALNCA certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALNCA Quality Manual except as noted above. This report is to be used in its entirety. ALNCA is not responsible for any assumptions of data quality if partial data packages are used

Summary of Hits

Job Number: C38090
Account: Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing
Collected: 01/18/15

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C38090-1	**NSH-008-011815**					
Silicon		20000	100		ug/l	EPA 200.7
Alkalinity, Bicarbonate		190	5.0		mg/l	SM2320 B-97
Alkalinity, Total as CaCO3		190	5.0		mg/l	SM2320 B-97
Chloride		15.1	1.3		mg/l	EPA 300/SW846 9056A
Fluoride		3.0	0.10		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		1.1	0.10		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate + Nitrite [a]		1.1	0.20		mg/l	SM4500-NO3 E-00
Silica, Dissolved [b]		42.8	0.21		mg/l	SW846 6010B
Solids, Total Dissolved		245	10		mg/l	SM2540 C-97
Specific Conductivity		426	1.0		umhos/cm	SM2510 B-97
Sulfate		11.1	0.50		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		4.2	1.0		mg/l	SM5310 C-00
pH [c]		8.16			su	SM4500H+ -00
C38090-1F	**NSH-008-011815**					
Arsenic		1.7	1.0		ug/l	EPA 200.8
Barium		39.6	1.0		ug/l	EPA 200.8
Calcium		42900	500		ug/l	EPA 200.8
Magnesium		16400	500		ug/l	EPA 200.8
Manganese		8.8	1.0		ug/l	EPA 200.8
Molybdenum		26.7	1.0		ug/l	EPA 200.8
Potassium		1530	500		ug/l	EPA 200.8
Selenium		1.4	1.0		ug/l	EPA 200.8
Sodium		18600	500		ug/l	EPA 200.8
Uranium		3.4	1.0		ug/l	EPA 200.8
Zinc		1180	20		ug/l	EPA 200.8

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)
(b) Calculated as: (Silicon * 2.139)
(c) This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5

Northern California ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	NSH-008-011815		
Lab Sample ID:	C38090-1	**Date Sampled:**	01/18/15
Matrix:	AQ - Ground Water	**Date Received:**	01/20/15
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Excelsior/Gunnison GW Testing		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T17544.D	1	01/21/15	BJ	01/21/15	OP11571	ET777
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.48	0.048	ug/l	
208-96-8	Acenaphthylene	ND	0.48	0.048	ug/l	
120-12-7	Anthracene	ND	0.48	0.048	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.095	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.095	0.039	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.095	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.095	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.095	0.037	ug/l	
218-01-9	Chrysene	ND	0.095	0.043	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.095	0.033	ug/l	
206-44-0	Fluoranthene	ND	0.48	0.048	ug/l	
86-73-7	Fluorene	ND	0.48	0.048	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.095	0.033	ug/l	
90-12-0	1-Methylnaphthalene [a]	ND	0.48	0.095	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.48	0.095	ug/l	
91-20-3	Naphthalene	ND	0.48	0.095	ug/l	
85-01-8	Phenanthrene	ND	0.48	0.048	ug/l	
129-00-0	Pyrene	ND	0.48	0.048	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		42-116%
321-60-8	2-Fluorobiphenyl	90%		44-115%
1718-51-0	Terphenyl-d14	108%		45-141%

(a) AZ:T2,T6

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NSH-008-011815		
Lab Sample ID:	C38090-1	**Date Sampled:**	01/18/15
Matrix:	AQ - Ground Water	**Date Received:**	01/20/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Silicon	20000	100	ug/l	1	01/23/15	01/23/15	RS	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA4564
(2) Prep QC Batch: MP9021

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NSH-008-011815		
Lab Sample ID:	C38090-1	**Date Sampled:**	01/18/15
Matrix:	AQ - Ground Water	**Date Received:**	01/20/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	190	5.0	mg/l	1	01/22/15 12:30	DQ	SM2320 B-97
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	01/22/15 12:30	DQ	SM2320 B-97
Alkalinity, Total as CaCO3	190	5.0	mg/l	1	01/22/15 12:30	DQ	SM2320 B-97
Chloride	15.1	1.3	mg/l	2.5	01/20/15 13:32	RL	EPA 300/SW846 9056A
Cyanide, Total	< 0.010	0.010	mg/l	1	01/22/15 16:22	DQ	SM4500-CN B,C,E-99
Fluoride	3.0	0.10	mg/l	1	01/20/15 13:06	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.1	0.10	mg/l	1	01/20/15 13:06	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate + Nitrite [a]	1.1	0.20	mg/l	1	01/20/15 13:06	RL	SM4500-NO3 E-00
Nitrogen, Nitrite	< 0.10	0.10	mg/l	1	01/20/15 13:06	RL	EPA 300/SW846 9056A
Silica, Dissolved [b]	42.8	0.21	mg/l	1	01/23/15 13:37	RS	SW846 6010B
Solids, Total Dissolved	245	10	mg/l	1	01/21/15 12:00	DQ	SM2540 C-97
Specific Conductivity	426	1.0	umhos/cm	1	01/21/15 13:35	HD	SM2510 B-97
Sulfate	11.1	0.50	mg/l	1	01/20/15 13:06	RL	EPA 300/SW846 9056A
Total Organic Carbon	4.2	1.0	mg/l	1	01/20/15 10:57	RL	SM5310 C-00
pH [c]	8.16		su	1	01/28/15 15:31	TN	SM4500H+ -00

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)
(b) Calculated as: (Silicon * 2.139)
(c) This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NSH-008-011815		
Lab Sample ID:	C38090-1F	**Date Sampled:**	01/18/15
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/20/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Antimony [a]	< 2.5	2.5	ug/l	5	01/22/15	01/28/15	RS	EPA 200.8 [3]	EPA 200.8 [4]
Arsenic	1.7	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Barium	39.6	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Beryllium	< 0.50	0.50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Boron [a]	< 100	100	ug/l	1	01/22/15	01/27/15	RS	EPA 200.8 [2]	EPA 200.8 [4]
Cadmium	< 0.50	0.50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Calcium	42900	500	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Chromium	< 4.0	4.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Cobalt	< 0.50	0.50	ug/l	1	01/22/15	01/27/15	RS	EPA 200.8 [2]	EPA 200.8 [4]
Copper	< 4.0	4.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Iron	< 50	50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Lead	< 0.50	0.50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Magnesium	16400	500	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Manganese	8.8	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Molybdenum	26.7	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Nickel	< 4.0	4.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Potassium	1530	500	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Selenium	1.4	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Silver	< 2.0	2.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Sodium	18600	500	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Thallium	< 0.50	0.50	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Uranium	3.4	1.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Vanadium	< 4.0	4.0	ug/l	1	01/22/15	01/22/15	RS	EPA 200.8 [1]	EPA 200.8 [4]
Zinc	1180	20	ug/l	5	01/22/15	01/28/15	RS	EPA 200.8 [3]	EPA 200.8 [4]

(1) Instrument QC Batch: MA4561
(2) Instrument QC Batch: MA4575
(3) Instrument QC Batch: MA4579
(4) Prep QC Batch: MP9017

(a) Elevated RL due to positive bias of Method Blank.

RL = Reporting Limit

Northern California ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Arizona Qualifiers
- Chain of Custody

Arizona Qualifiers

Job Number: C38090
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

The following Arizona qualifiers have been applied to data and/or QC in this report.

Qual	Description
B1	Target analyte detected in method blank at or above the method reporting limit.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
T2	Cited ADHS licensed method does not contain this analyte as part of method compound list.
T6	The reported result cannot be used for compliance purposes.

PHOENIX ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking # 7726 3296 7612
Bottle Order Control #
Accutest Quote #
Accutest NC Job #: C 38090

Client / Reporting Information

Company Name: EXCELSIOR
Address: 2999 N 44th St, Ste 300
City: Phoenix State: AZ Zip: 85018
Project Contact: Rebecca Sawyer
Phone #: 602-559-5583
Samplers's Name: Lauren Candreva

Project Information

Project Name: Gunnison GW Testing
Street
City State
Project #
EMAIL: rsawyer@excelsiormining.com
Client Purchase Order #

Requested Analysis

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	Carbon 14 Isotopes: C, H, S, stable C	TPH 8015D	524.2	900.0 / 903.1	TDS	245.1 Hg	sulfide, cyanide	200.8 Diss. metals	Nitrate / Nitrite	Wet Chem / Anions / Alk	LAB USE ONLY
1	NSH-008-011815	1/18/15	1500	LC	GW	16									X	X	X	X	X	X	X	X	X	X	

Matrix Codes

WW- Wastewater
GW- Ground Water
SW- Surface Water
SO- Soil
OI-Oil
WP-Wipe
LIQ - Non-aqueous Liquid
AIR
DW- Drinking Water (Perchlorate Only)

Turnaround Time (Business days)

Approved By / Date:
- 10 Day
- 5 Day
- 3 Day
- 2 Day
- 1 Day
- Same Day

Emergency T/A data available VIA Lablink

Data Deliverable Information

- Commercial "A" - Results only
- Commercial "B" - Results with QC summaries
- Commerical "B+" - Results, QC, and chromatograms
- FULT1 - Level 4 data package
- EDF for Geotracker
- EDD Format
- Provide EDF Global ID
- Provide EDF Logcode:

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	1-19-15 1455	[signature]	[signature]	1/19/15 1650	[signature] → FedEx
2						01/20/15
3	FedEx	1/20/15 0925	[signature]			
4						
5						

Custody Seal #
Appropriate Bottle / Pres. Y / N
Headspace Y / N
On Ice Y / N
Cooler Temp. 1.7 / 1.7 °C
Labels match Coc? Y / N
Separate Receiving Check List used: Y / N

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C38090: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C38090 **Client:** EXCELSIOR **Project:** GUNNISON GW TESTING

Date / Time Received: 1/20/2015 9:25:00 AM **Delivery Method:** FedEx **Airbill #'s:** 772632967612

Cooler Temps (Initial/Adjusted): #1: (1.7/1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR2;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www/accutest.com

5.2

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C38090: Chain of Custody

Page 2 of 2

Northern California ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C38090
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11571-MB	T17528.D	1	01/21/15	BJ	01/20/15	OP11571	ET777

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38090-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.50	0.050	ug/l	
208-96-8	Acenaphthylene	ND	0.50	0.050	ug/l	
120-12-7	Anthracene	ND	0.50	0.050	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.053	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.041	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.045	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.50	0.050	ug/l	
86-73-7	Fluorene	ND	0.50	0.050	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.035	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.50	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.50	0.10	ug/l	
91-20-3	Naphthalene	ND	0.50	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.50	0.050	ug/l	
129-00-0	Pyrene	ND	0.50	0.050	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	76%	42-116%
321-60-8	2-Fluorobiphenyl	81%	44-115%
1718-51-0	Terphenyl-d14	120%	45-141%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C38090
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11571-BS	T17526.D	1	01/21/15	BJ	01/20/15	OP11571	ET777
OP11571-BSD	T17527.D	1	01/21/15	BJ	01/20/15	OP11571	ET777

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38090-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	5	3.1	62	3.2	64	3	54-108/21
208-96-8	Acenaphthylene	5	3.1	62	3.4	68	9	53-108/22
120-12-7	Anthracene	5	3.6	72	4.0	80	11	58-111/19
56-55-3	Benzo(a)anthracene	5	4.8	96	4.9	98	2	59-120/14
50-32-8	Benzo(a)pyrene	5	4.5	90	4.4	88	2	53-113/18
205-99-2	Benzo(b)fluoranthene	5	5.1	102	4.9	98	4	57-127/18
191-24-2	Benzo(g,h,i)perylene	5	4.9	98	5.4	108	10	52-126/21
207-08-9	Benzo(k)fluoranthene	5	4.3	86	3.9	78	10	60-125/16
218-01-9	Chrysene	5	4.3	86	4.3	86	0	63-120/14
53-70-3	Dibenzo(a,h)anthracene	5	4.6	92	4.9	98	6	53-127/22
206-44-0	Fluoranthene	5	4.4	88	4.4	88	0	59-123/17
86-73-7	Fluorene	5	3.4	68	3.4	68	0	57-113/21
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.5	90	4.9	98	9	48-130/22
90-12-0	1-Methylnaphthalene	5	2.9	58	3.2	64	10	51-104/24
91-57-6	2-Methylnaphthalene	5	3.3	66	3.3	66	0	52-108/25
91-20-3	Naphthalene	5	2.9	58	3.0	60	3	51-102/23
85-01-8	Phenanthrene	5	3.9	78	3.8	76	3	58-112/18
129-00-0	Pyrene	5	4.1	82	4.4	88	7	52-124/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	65%	70%	42-116%
321-60-8	2-Fluorobiphenyl	71%	76%	44-115%
1718-51-0	Terphenyl-d14	119%	114%	45-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C38090
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11571-MS	T17542.D	1	01/21/15	BJ	01/20/15	OP11571	ET777
OP11571-MSD	T17543.D	1	01/21/15	BJ	01/20/15	OP11571	ET777
C38089-6	T17533.D	1	01/21/15	BJ	01/20/15	OP11571	ET777

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38090-1

CAS No.	Compound	C38089-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		9.62	6.3	66	9.62	6.1	63	3	54-108/21
208-96-8	Acenaphthylene	ND		9.62	6.4	67	9.62	6.6	69	3	53-108/22
120-12-7	Anthracene	ND		9.62	7.5	78	9.62	7.8	81	4	58-111/19
56-55-3	Benzo(a)anthracene	ND		9.62	9.0	94	9.62	9.4	98	4	59-120/14
50-32-8	Benzo(a)pyrene	ND		9.62	8.0	83	9.62	8.1	84	1	53-113/18
205-99-2	Benzo(b)fluoranthene	ND		9.62	8.1	84	9.62	8.5	88	5	57-127/18
191-24-2	Benzo(g,h,i)perylene	ND		9.62	9.0	94	9.62	9.2	96	2	52-126/21
207-08-9	Benzo(k)fluoranthene	ND		9.62	8.0	83	9.62	7.8	81	3	60-125/16
218-01-9	Chrysene	ND		9.62	7.7	80	9.62	8.2	85	6	63-120/14
53-70-3	Dibenzo(a,h)anthracene	ND		9.62	8.0	83	9.62	8.7	90	8	53-127/22
206-44-0	Fluoranthene	ND		9.62	8.1	84	9.62	8.7	90	7	59-123/17
86-73-7	Fluorene	ND		9.62	6.9	72	9.62	7.0	73	1	57-113/21
193-39-5	Indeno(1,2,3-cd)pyrene	ND		9.62	8.1	84	9.62	9.7	101	18	48-130/22
90-12-0	1-Methylnaphthalene	ND		9.62	6.3	66	9.62	6.2	64	2	51-104/24
91-57-6	2-Methylnaphthalene	ND		9.62	6.6	69	9.62	6.3	66	5	52-108/25
91-20-3	Naphthalene	ND		9.62	6.0	62	9.62	5.7	59	5	51-102/23
85-01-8	Phenanthrene	ND		9.62	7.4	77	9.62	7.7	80	4	58-112/18
129-00-0	Pyrene	ND		9.62	8.7	90	9.62	8.5	88	2	52-124/20

CAS No.	Surrogate Recoveries	MS	MSD	C38089-6	Limits
4165-60-0	Nitrobenzene-d5	73%	66%	87%	42-116%
321-60-8	2-Fluorobiphenyl	78%	73%	93%	44-115%
1718-51-0	Terphenyl-d14	102%	98%	118%	45-141%

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9017
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	4.5	13	222	* (a)
Antimony	0.50	.27	.42	0.59	* (a)
Arsenic	1.0	.61	.036	0.39	<1.0
Barium	1.0	.021	.091	0.18	<1.0
Beryllium	0.50		.035	0.0052	<0.50
Boron	100	.18	.57	49.8	<100 (b)
Cadmium	0.50	.0056	.024	0.0045	<0.50
Calcium	500	80	10	482	* (a)
Chromium	4.0	.05	.043	0.14	<4.0
Cobalt	0.50	.037	.14	0.0086	<0.50
Copper	4.0	.036	.39	0.13	<4.0
Iron	50	6.2	4.4	10.7	<50
Lead	0.50	.011	.068	0.060	<0.50
Magnesium	500	1.1	.79	47.5	<500
Manganese	1.0	.024	.071	0.35	<1.0
Molybdenum	1.0	.23	.46	0.40	<1.0
Nickel	4.0	.35	.12	6.0	* (a)
Potassium	500	4.7	5.1	-0.49	<500
Selenium	1.0	.33	.21	0.062	<1.0
Silver	2.0	.0096	.018	0.011	<2.0
Sodium	500	4.3	9.7	8.0	<500
Strontium	5.0	.043	.072		
Thallium	0.50	.08	.19	0.019	<0.50
Tin	5.0	.11	.42		
Titanium	1.0	.17	.13		
Vanadium	4.0	.72	.096	1.0	<4.0
Uranium	1.0	.12	.017	0.017	<1.0
Zinc	4.0	.45	.81	0.44	<4.0

Associated samples MP9017: C38090-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) All sample results < RL or > 10x method blank concentration. AZ:B1
(b) Elevated RL/MDL due to positive bias of Method Blank.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9017
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	C38090-1F Original	MS	Spikelot MPIR5	% Rec	QC Limits
Aluminum	7.4	12400	12500	99.1	70-130
Antimony	0.0	634	500	126.8	70-130
Arsenic	1.7	503	500	100.3	70-130
Barium	39.6	573	500	106.7	70-130
Beryllium	0.036	557	500	111.4	70-130
Boron	51.7	567	500	103.1	70-130
Cadmium	0.038	531	500	106.2	70-130
Calcium	42900	57600	12500	117.6	70-130
Chromium	0.16	589	500	117.8	70-130
Cobalt	0.0	570	500	114.0	70-130
Copper	2.4	597	500	118.9	70-130
Iron	0.0	12000	12500	96.0	70-130
Lead	0.032	591	500	118.2	70-130
Magnesium	16400	29700	12500	106.4	70-130
Manganese	8.8	598	500	117.8	70-130
Molybdenum	26.7	501	500	94.9	70-130
Nickel	0.0	498	500	99.6	70-130
Potassium	1530	18500	17000	99.8	70-130
Selenium	1.4	519	500	103.5	70-130
Silver	0.012	492	500	98.4	70-130
Sodium	18600	32000	12500	107.2	70-130
Strontium					
Thallium	0.083	516	500	103.2	70-130
Tin					
Titanium					
Vanadium	3.5	575	500	114.3	70-130
Uranium	3.4	531	500	105.5	70-130
Zinc	1180	1730	500	110.0	70-130

Associated samples MP9017: C38090-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9017
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	C38090-1F Original	MSD	Spikelot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum	7.4	12300	12500	98.3	0.8	20
Antimony	0.0	612	500	122.4	3.5	20
Arsenic	1.7	497	500	99.1	1.2	20
Barium	39.6	562	500	104.5	1.9	20
Beryllium	0.036	556	500	111.2	0.2	20
Boron	51.7	559	500	101.5	1.4	20
Cadmium	0.038	519	500	103.8	2.3	20
Calcium	42900	57600	12500	117.6	0.0	20
Chromium	0.16	576	500	115.2	2.2	20
Cobalt	0.0	569	500	113.8	0.2	20
Copper	2.4	587	500	116.9	1.7	20
Iron	0.0	12300	12500	98.4	2.5	20
Lead	0.032	586	500	117.2	0.8	20
Magnesium	16400	29700	12500	106.4	0.0	20
Manganese	8.8	586	500	115.4	2.0	20
Molybdenum	26.7	505	500	95.7	0.8	20
Nickel	0.0	491	500	98.2	1.4	20
Potassium	1530	18400	17000	99.2	0.5	20
Selenium	1.4	533	500	106.3	2.7	20
Silver	0.012	487	500	97.4	1.0	20
Sodium	18600	31600	12500	104.0	1.3	20
Strontium						
Thallium	0.083	512	500	102.4	0.8	20
Tin						
Titanium						
Vanadium	3.5	568	500	112.9	1.2	20
Uranium	3.4	535	500	106.3	0.8	20
Zinc	1180	1730	500	110.0	0.0	20

Associated samples MP9017: C38090-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9017
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum	12400	12500	99.2	85-115
Antimony	570	500	114.0	85-115
Arsenic	496	500	99.2	85-115
Barium	517	500	103.4	85-115
Beryllium	549	500	109.8	85-115
Boron	519	500	103.8	85-115
Cadmium	522	500	104.4	85-115
Calcium	12800	12500	102.4	85-115
Chromium	496	500	99.2	85-115
Cobalt	554	500	110.8	85-115
Copper	492	500	98.4	85-115
Iron	12300	12500	98.4	85-115
Lead	529	500	105.8	85-115
Magnesium	12600	12500	100.8	85-115
Manganese	493	500	98.6	85-115
Molybdenum	460	500	92.0	85-115
Nickel	510	500	102.0	85-115
Potassium	17000	17000	100.0	85-115
Selenium	517	500	103.4	85-115
Silver	492	500	98.4	85-115
Sodium	12500	12500	100.0	85-115
Strontium				
Thallium	508	500	101.6	85-115
Tin				
Titanium				
Vanadium	565	500	113.0	85-115
Uranium	515	500	103.0	85-115
Zinc	515	500	103.0	85-115

Associated samples MP9017: C38090-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9017
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	C38090-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum	7.35	0.00	100.0(a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	1.66	0.645	100.0(a)	0-10
Barium	39.6	37.9	4.2	0-10
Beryllium	0.0355	0.0379	6.6	0-10
Boron	51.7	45.4	12.2*(b)	0-10
Cadmium	0.0379	0.0215	100.0(a)	0-10
Calcium	42900	44200	3.1	0-10
Chromium	0.162	0.00	100.0(a)	0-10
Cobalt	0.00939	0.0611	NC	0-10
Copper	2.37	2.08	12.4*(b)	0-10
Iron	0.00	0.00	NC	0-10
Lead	0.0318	0.00	100.0(a)	0-10
Magnesium	16400	16900	3.0	0-10
Manganese	8.79	8.14	7.4	0-10
Molybdenum	26.7	19.3	27.7*(b)	0-10
Nickel	0.226	0.00	NC	0-10
Potassium	1530	1540	0.7	0-10
Selenium	1.36	1.02	100.0(a)	0-10
Silver	0.0123	0.00	100.0(a)	0-10
Sodium	18600	19100	3.0	0-10
Strontium				
Thallium	0.0827	0.00	100.0(a)	0-10
Tin				
Titanium				
Vanadium	3.48	1.69	100.0(a)	0-10
Uranium	3.39	3.09	9.1	0-10
Zinc	1180	1230	4.1	0-10

Associated samples MP9017: C38090-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9021
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 01/23/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	13	8.5		
Antimony	6.0	.7	.51		
Arsenic	10	.7	.65		
Barium	200	.4	.35		
Beryllium	5.0	.2	.4		
Boron	100	.9	.64		
Cadmium	2.0	.2	.15		
Calcium	5000	7.1	12		
Chromium	10	.3	.41		
Cobalt	5.0	.2	.3		
Copper	10	1.2	3		
Iron	200	6.4	12		
Lead	10	.7	.85		
Lithium	50		2		
Magnesium	5000	27	36		
Manganese	15	.1	1.3		
Molybdenum	20	.2	.22		
Nickel	5.0	.2	.12		
Potassium	10000	18	44		
Selenium	10	1.8	2.2		
Silicon	100	1.2	6.9	-1.9	<100
Silver	5.0	.3	.47		
Sodium	10000	15	13		
Strontium	10	.2	.24		
Thallium	10	.5	.54		
Tin	50	.2	.7		
Titanium	10	.4	.34		
Vanadium	10	.3	.3		
Zinc	20	.3	4.2		

Associated samples MP9021: C38090-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9021
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 01/23/15

Metal	C38143-1R Original MS		Spikelot MPIR5	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	anr				
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon	3410	3610	250	80.0	70-130
Silver	anr				
Sodium	anr				
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP9021: C38090-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9021
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 01/23/15

Metal	C38143-1R Original	MSD	Spikelot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	anr					
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silicon	3410	3680	250	108.0	1.9	20
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP9021: C38090-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9021
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 01/23/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon	266	250	106.4	85-115
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP9021: C38090-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9021
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 01/23/15

Metal	C38143-1R Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon	3410	3230	5.5	0-10
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP9021: C38090-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Northern California ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN15517	5.0	0.0	mg/l	250	248	99.2	75-125%
Chloride	GP7322/GN15544	0.50	0.0	mg/l	5	5.03	100.6	90-110%
Cyanide, Total	GP7309/GN15520	0.010	0.0	mg/l	0.100	0.089	89.0	85-115%
Fluoride	GP7322/GN15544	0.10	0.010	mg/l	5	4.99	99.8	90-110%
Nitrogen, Nitrate	GP7322/GN15544	0.10	0.0	mg/l	5	5.08	101.6	90-110%
Nitrogen, Nitrite	GP7322/GN15544	0.10	0.0	mg/l	5	5.03	100.6	90-110%
Solids, Total Dissolved	GN15508	10	0.0	mg/l				
Specific Conductivity	GN15509	1.0	0.0	umhos/cm				
Sulfate	GP7322/GN15544	0.50	0.0	mg/l	5	5.01	100.2	90-110%
Total Organic Carbon	GP7305/GN15502	1.0	0.75	mg/l	25	26.2	104.9	75-125%

Associated Samples:
Batch GP7305: C38090-1
Batch GP7309: C38090-1
Batch GP7322: C38090-1
Batch GN15508: C38090-1
Batch GN15509: C38090-1
Batch GN15517: C38090-1
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN15517	mg/l	250	250	0.8	
Chloride	GP7322/GN15544	mg/l	5	5.06	0.6	25%
Cyanide, Total	GP7309/GN15520	mg/l	0.100	0.10	12.8	20%
Fluoride	GP7322/GN15544	mg/l	5	4.86	2.6	25%
Nitrogen, Nitrate	GP7322/GN15544	mg/l	5	5.10	0.4	25%
Nitrogen, Nitrite	GP7322/GN15544	mg/l	5	5.06	0.6	25%
Sulfate	GP7322/GN15544	mg/l	5	5.05	0.8	25%
Total Organic Carbon	GP7305/GN15502	mg/l	25	25.1	4.2	

Associated Samples:
Batch GP7305: C38090-1
Batch GP7309: C38090-1
Batch GP7322: C38090-1
Batch GN15517: C38090-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN15517	C38018-1	mg/l	345	333	3.5	0-25%
Solids, Total Dissolved	GN15508	C38090-1	mg/l	245	256	4.4	0-10%
Specific Conductivity	GN15509	C38079-1	umhos/cm	46100	46500	0.9	0-10%
pH	GN15565	C38253-1	su	7.03	7.07	0.6	0-25%

Associated Samples:
Batch GN15508: C38090-1
Batch GN15509: C38090-1
Batch GN15517: C38090-1
Batch GN15565: C38090-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP7322/GN15544	C38090-1	mg/l	15.1	12.5	30.1	120.0	80-120%
Cyanide, Total	GP7309/GN15520	C38027-1	mg/l	0.0	0.100	0.098	98.4	85-115%
Fluoride	GP7322/GN15544	C38090-1	mg/l	3.0	12.5	14.6	92.8	80-120%
Nitrogen, Nitrate	GP7322/GN15544	C38090-1	mg/l	1.1	12.5	14.7	108.8	80-120%
Nitrogen, Nitrite	GP7322/GN15544	C38090-1	mg/l	0.0	12.5	13.5	108.0	80-120%
Sulfate	GP7322/GN15544	C38090-1	mg/l	11.1	12.5	23.5	99.2	80-120%
Total Organic Carbon	GP7305/GN15502	C38054-1	mg/l	3230	5000	7960	94.6	75-125%

Associated Samples:
Batch GP7305: C38090-1
Batch GP7309: C38090-1
Batch GP7322: C38090-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38090
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP7322/GN15544	C38090-1	mg/l	15.1	12.5	30.1	0.0	
Cyanide, Total	GP7309/GN15520	C38027-1	mg/l	0.0	0.100	0.092	6.8	20%
Fluoride	GP7322/GN15544	C38090-1	mg/l	3.0	12.5	14.6	0.0	
Nitrogen, Nitrate	GP7322/GN15544	C38090-1	mg/l	1.1	12.5	14.7	0.0	
Nitrogen, Nitrite	GP7322/GN15544	C38090-1	mg/l	0.0	12.5	13.6	0.7	
Sulfate	GP7322/GN15544	C38090-1	mg/l	11.1	12.5	23.5	0.0	

Associated Samples:
Batch GP7309: C38090-1
Batch GP7322: C38090-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Northern California
ACCUTEST
LABORATORIES

02/27/15

Technical Report for

Excelsior Mining Corporation

Excelsior/Gunnison GW Testing

Accutest Job Number: C38505

Sampling Date: 02/12/15

Report to:

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Total number of pages in report: **40**

NELAP ACCREDITED TNI LABORATORY

James J. Rhudy
Lab Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

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Accutest Laboratories

Sample Summary

Excelsior Mining Corporation

Job No: C38505

Excelsior/Gunnison GW Testing

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C38505-1	02/12/15	11:30	SC	02/13/15	AQ	Ground Water	NSH-027-021215
C38505-1F	02/12/15	11:30	SC	02/13/15	AQ	Ground Water	NSH-027-021215

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Excelsior Mining Corporation	**Job No**	C38505
Site:	Excelsior/Gunnison GW Testing	**Report Date**	2/27/2015 7:57:01 PM

1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 02/12/2015 and were received at Accutest on 02/13/2015 properly preserved, at 1.7 Deg. C and intact. These Samples received an Accutest job number of C38505. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP11719

- Sample(s) C38530-1MS, C38530-1MSD were used as the QC samples indicated.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Benzo(a)pyrene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene are outside control limits. Probable cause due to matrix interference. Emulsion formed during extraction process.
- RPD for MSD for Indeno(1,2,3-cd)pyrene is outside laboratory control limits for sample OP11719-MSD.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP9135

- Sample(s) C38505-1FMS, C38505-1FMSD, C38505-1FSDL were used as the QC samples for metals.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP9129

- Sample(s) C38505-1FMS, C38505-1FMSD, C38505-1FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Antimony, Arsenic, Cadmium, Chromium, Cobalt, Iron, Lead, Silver, Thallium, Vanadium are outside control limits for sample MP9129-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- RPD(s) for Serial Dilution for Boron, Calcium, Copper, Magnesium, Manganese, Potassium, Sodium are outside control limits for sample MP9129-SD1. Serial dilution indicates possible matrix interference.

Metals By Method EPA 245.1

Matrix: AQ **Batch ID:** MP9132

- Sample(s) C38505-1FMS, C38505-1FMSD were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP7403

- Sample(s) C38357-2MS, C38357-2MSD were used as the QC samples for Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite.

Wet Chemistry By Method SM2320 B-97

Matrix: AQ **Batch ID:** GN15734

- Sample(s) C38507-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM2510 B-97

Matrix: AQ	Batch ID: GN15706

- Sample(s) C38505-1DUP were used as the QC samples for Specific Conductivity.

Wet Chemistry By Method SM2540 C-97

Matrix: AQ	Batch ID: GN15698

- Sample(s) C38505-1DUP were used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM4500-CN B,C,E-99

Matrix: AQ	Batch ID: GP7415

- Sample(s) C38460-1MS, C38460-1MSD were used as the QC samples for Cyanide, Total.

Wet Chemistry By Method SM4500H+ -00

Matrix: AQ	Batch ID: GN15695

- Sample(s) C38506-1DUP were used as the QC samples for pH.
- The following samples were run outside of holding time for method SM4500H+ -00: C38505-1. This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5

Wet Chemistry By Method SM4500S D-00

Matrix: AQ	Batch ID: GN15711

- Sample(s) C38505-1MS, C38505-1MSD were used as the QC samples for Sulfide.

Wet Chemistry By Method SM5310 C-00

Matrix: AQ	Batch ID: GP7449

- Sample(s) C38505-1MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SW846 6010B

Matrix: AQ	Batch ID: R9027

- C38505-1F for Silica, Dissolved: Calculated as: (Silicon * 2.139)

Accutest Laboratories Northern California (ALNCA) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALNCA and as stated on the COC. ALNCA certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALNCA Quality Manual except as noted above. This report is to be used in its entirety. ALNCA is not responsible for any assumptions of data quality if partial data packages are used

Summary of Hits

Job Number: C38505
Account: Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing
Collected: 02/12/15

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C38505-1	**NSH-027-021215**					
Alkalinity, Bicarbonate		154	5.0		mg/l	SM2320 B-97
Alkalinity, Total as CaCO3		154	5.0		mg/l	SM2320 B-97
Chloride [a]		25.2	2.5		mg/l	EPA 300/SW846 9056A
Fluoride		3.8	0.10		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		1.2	0.10		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		284	10		mg/l	SM2540 C-97
Specific Conductivity		384	1.0		umhos/cm	SM2510 B-97
Sulfate		15.7	0.50		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.1	1.0		mg/l	SM5310 C-00
pH [b]		7.93			su	SM4500H+ -00
C38505-1F	**NSH-027-021215**					
Arsenic		1.6	1.0		ug/l	EPA 200.8
Barium		19.0	1.0		ug/l	EPA 200.8
Boron		44.3	5.0		ug/l	EPA 200.8
Calcium		28500	500		ug/l	EPA 200.8
Magnesium		14400	500		ug/l	EPA 200.8
Manganese		6.7	1.0		ug/l	EPA 200.8
Molybdenum		51.9	1.0		ug/l	EPA 200.8
Potassium		2030	500		ug/l	EPA 200.8
Selenium		1.7	1.0		ug/l	EPA 200.8
Silicon		25200	100		ug/l	EPA 200.7
Sodium		20200	500		ug/l	EPA 200.8
Thallium		0.73	0.50		ug/l	EPA 200.8
Uranium		10.7	1.0		ug/l	EPA 200.8
Zinc		32.7	4.0		ug/l	EPA 200.8
Silica, Dissolved [c]		53.9	0.21		mg/l	SW846 6010B

(a) AZ:D2
(b) This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5
(c) Calculated as: (Silicon * 2.139)

Northern California ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	NSH-027-021215		
Lab Sample ID:	C38505-1	**Date Sampled:**	02/12/15
Matrix:	AQ - Ground Water	**Date Received:**	02/13/15
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Excelsior/Gunnison GW Testing		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T17908.D	1	02/16/15	MT	02/16/15	OP11719	ET796
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.47	0.047	ug/l	
208-96-8	Acenaphthylene	ND	0.47	0.047	ug/l	
120-12-7	Anthracene	ND	0.47	0.047	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.094	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.094	0.039	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.094	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.094	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.094	0.037	ug/l	
218-01-9	Chrysene	ND	0.094	0.042	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.094	0.033	ug/l	
206-44-0	Fluoranthene	ND	0.47	0.047	ug/l	
86-73-7	Fluorene	ND	0.47	0.047	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.094	0.033	ug/l	
90-12-0	1-Methylnaphthalene [a]	ND	0.47	0.094	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.47	0.094	ug/l	
91-20-3	Naphthalene	ND	0.47	0.094	ug/l	
85-01-8	Phenanthrene	ND	0.47	0.047	ug/l	
129-00-0	Pyrene	ND	0.47	0.047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		42-116%
321-60-8	2-Fluorobiphenyl	96%		44-115%
1718-51-0	Terphenyl-d14	90%		45-141%

(a) AZ:T2,T6

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NSH-027-021215		
Lab Sample ID:	C38505-1	**Date Sampled:**	02/12/15
Matrix:	AQ - Ground Water	**Date Received:**	02/13/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	154	5.0	mg/l	1	02/20/15 10:15	DQ	SM2320 B-97
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	02/20/15 10:15	DQ	SM2320 B-97
Alkalinity, Total as CaCO3	154	5.0	mg/l	1	02/20/15 10:15	DQ	SM2320 B-97
Chloride [a]	25.2	2.5	mg/l	5	02/13/15 19:42	RL	EPA 300/SW846 9056A
Cyanide, Total	< 0.010	0.010	mg/l	1	02/19/15 14:56	DQ	SM4500-CN B,C,E-99
Fluoride	3.8	0.10	mg/l	1	02/13/15 14:47	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.2	0.10	mg/l	1	02/13/15 14:47	RL	EPA 300/SW846 9056A
Nitrogen, Nitrite	< 0.10	0.10	mg/l	1	02/13/15 14:47	RL	EPA 300/SW846 9056A
Solids, Total Dissolved	284	10	mg/l	1	02/16/15 16:30	DQ	SM2540 C-97
Specific Conductivity	384	1.0	umhos/cm	1	02/18/15 10:00	TN	SM2510 B-97
Sulfate	15.7	0.50	mg/l	1	02/13/15 14:47	RL	EPA 300/SW846 9056A
Sulfide	< 0.020	0.020	mg/l	1	02/18/15 15:24	PH	SM4500S D-00
Total Organic Carbon	1.1	1.0	mg/l	1	02/24/15 11:48	RL	SM5310 C-00
pH [b]	7.93		su	1	02/16/15 09:07	TN	SM4500H+ -00

(a) AZ:D2
(b) This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time. AZ:H5

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NSH-027-021215		
Lab Sample ID:	C38505-1F	**Date Sampled:**	02/12/15
Matrix:	AQ - Ground Water	**Date Received:**	02/13/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Antimony	< 0.50	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Arsenic	1.6	1.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Barium	19.0	1.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Beryllium	< 0.50	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Boron	44.3	5.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Cadmium	< 0.50	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Calcium	28500	500	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Chromium	< 4.0	4.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Cobalt	< 0.50	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Copper	< 4.0	4.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Iron	< 50	50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Lead	< 0.50	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Magnesium	14400	500	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Manganese	6.7	1.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Mercury	< 0.20	0.20	ug/l	1	02/16/15	02/17/15	EB	EPA 245.1 [1]	EPA 245.1 [6]
Molybdenum	51.9	1.0	ug/l	1	02/17/15	02/26/15	JR	EPA 200.8 [4]	EPA 200.8 [5]
Nickel	< 4.0	4.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Potassium	2030	500	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Selenium	1.7	1.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Silicon	25200	100	ug/l	1	02/17/15	02/17/15	HD	EPA 200.7 [2]	EPA 200.7 [7]
Silver	< 2.0	2.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Sodium	20200	500	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Thallium	0.73	0.50	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Uranium	10.7	1.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Vanadium	< 4.0	4.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]
Zinc	32.7	4.0	ug/l	1	02/17/15	02/25/15	JR	EPA 200.8 [3]	EPA 200.8 [5]

(1) Instrument QC Batch: MA4626
(2) Instrument QC Batch: MA4627
(3) Instrument QC Batch: MA4649
(4) Instrument QC Batch: MA4652
(5) Prep QC Batch: MP9129
(6) Prep QC Batch: MP9132
(7) Prep QC Batch: MP9135

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NSH-027-021215		
Lab Sample ID:	C38505-1F	**Date Sampled:**	02/12/15
Matrix:	AQ - Ground Water	**Date Received:**	02/13/15
		Percent Solids:	n/a
Project:	Excelsior/Gunnison GW Testing		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Silica, Dissolved [a]	53.9	0.21	mg/l	1	02/17/15 16:56	HD	SW846 6010B

(a) Calculated as: (Silicon * 2.139)

RL = Reporting Limit

Northern California ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Arizona Qualifiers
- Chain of Custody

Arizona Qualifiers

Job Number: C38505
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

The following Arizona qualifiers have been applied to data and/or QC in this report.

Qual	Description
D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
R9	Sample RPD exceeded the laboratory acceptance limit.
T2	Cited ADHS licensed method does not contain this analyte as part of method compound list.
T6	The reported result cannot be used for compliance purposes.

PHOENIX ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FedEx Tracking # 8066 3210 8017
Bottle Order Control #
Accutest Quote #
Accutest NC Job #: C38505

Client / Reporting Information

Company Name: Haley + Aldrich
Address: 400 E Van Buren St 545
City: Phoenix State: Az Zip: 85004
Project Contact: Lauren Candreva
Phone #: (602) 760-2429
Samplers's Name: Shannon Collinge

Project Information

Project Name: Gunnison Copper Project
Street: Cochise County
City: State: Az
Project #:
EMAIL: Lcandreva@Haleyaldrich.com
Client Purchase Order #:

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH +Ascorbic	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	Metals - Dis. metals Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr 200.8	Anions, Alkalinity, wet Chem.	Anions - Nitrate/Nitrite SM4500	Cyanide, Sulfide SM4500-CN, SM4500-S	Total Organic Carbon SM5310C	SGM, Fluoride, Benzene, VOC's Toluene, Ethylbenzene	PAHs Full List 8270SIM	Radio chemistry 900.0 903.1 ASTM D3972	Isotopes - Oxygen 18/16 Hydrogen 2/1			Matrix Codes
1	NSH-027-021215	2/12/15	1130	SC	GW	15	3	2		3	7				X	X	X	X	X	X	X	X	X			LAB USE ONLY

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI-Oil; WP-Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

Turnaround Time (Business days)

Approved By / Date:

- 10 Day
- 5 Day
- 3 Day
- 2 Day
- 1 Day
- Same Day

Emergency T/A data available VIA Lablink

Data Deliverable Information

- Commercial "A" - Results only
- Commercial "B" - Results with QC summaries
- Commerical "B+" - Results, QC, and chromatograms
- FULT1 - Level 4 data package
- EDF for Geotracker
- EDD Format
- Provide EDF Global ID
- Provide EDF Logcode:

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	2/12/15 1310	1 FedEx 0866 3210 8017		2/12/15 1310	2
Relinquished by: 3 Fedex	Date Time: 2/13/15 0755	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # Y	Appropriate Bottle / Pres. Y / N; Labels match Coc? Y / N	Headspace Y / N; Separate Receiving Check List used: Y / N; On Ice Y / N; Cooler Temp. 1.7 / 1.7 °C

C38505: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C38505 **Client:** HALEY & ALDRICH **Project:** GUNNISON COPPER PROJECT

Date / Time Received: 2/13/2015 7:55:00 AM **Delivery Method:** FedEx **Airbill #'s:** 806632108017

Cooler Temps (Initial/Adjusted): #1: (1.7/1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR2;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www/accutest.com

5.2

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C38505: Chain of Custody

Page 2 of 2

Northern California ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C38505
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11719-MB	T17902.D	1	02/16/15	MT	02/16/15	OP11719	ET796

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38505-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.50	0.050	ug/l	
208-96-8	Acenaphthylene	ND	0.50	0.050	ug/l	
120-12-7	Anthracene	ND	0.50	0.050	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.053	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.041	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.045	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.50	0.050	ug/l	
86-73-7	Fluorene	ND	0.50	0.050	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.035	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.50	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.50	0.10	ug/l	
91-20-3	Naphthalene	ND	0.50	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.50	0.050	ug/l	
129-00-0	Pyrene	ND	0.50	0.050	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	76%	42-116%
321-60-8	2-Fluorobiphenyl	89%	44-115%
1718-51-0	Terphenyl-d14	114%	45-141%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C38505
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11719-BS	T17903.D	1	02/16/15	MT	02/16/15	OP11719	ET796
OP11719-BSD	T17904.D	1	02/16/15	MT	02/16/15	OP11719	ET796

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38505-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	5	3.9	78	4.1	82	5	54-108/21
208-96-8	Acenaphthylene	5	4.0	80	3.9	78	3	53-108/22
120-12-7	Anthracene	5	4.5	90	4.5	90	0	58-111/19
56-55-3	Benzo(a)anthracene	5	5.0	100	5.0	100	0	59-120/14
50-32-8	Benzo(a)pyrene	5	4.6	92	4.2	84	9	53-113/18
205-99-2	Benzo(b)fluoranthene	5	5.8	116	5.5	110	5	57-127/18
191-24-2	Benzo(g,h,i)perylene	5	3.8	76	3.8	76	0	52-126/21
207-08-9	Benzo(k)fluoranthene	5	4.1	82	4.0	80	2	60-125/16
218-01-9	Chrysene	5	4.5	90	4.6	92	2	63-120/14
53-70-3	Dibenzo(a,h)anthracene	5	3.9	78	3.9	78	0	53-127/22
206-44-0	Fluoranthene	5	4.9	98	4.9	98	0	59-123/17
86-73-7	Fluorene	5	4.4	88	4.3	86	2	57-113/21
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.3	86	3.8	76	12	48-130/22
90-12-0	1-Methylnaphthalene	5	3.8	76	3.8	76	0	51-104/24
91-57-6	2-Methylnaphthalene	5	3.9	78	3.8	76	3	52-108/25
91-20-3	Naphthalene	5	3.6	72	3.7	74	3	51-102/23
85-01-8	Phenanthrene	5	4.4	88	4.5	90	2	58-112/18
129-00-0	Pyrene	5	5.0	100	4.9	98	2	52-124/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	76%	77%	42-116%
321-60-8	2-Fluorobiphenyl	86%	91%	44-115%
1718-51-0	Terphenyl-d14	102%	108%	45-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C38505
Account: EXLMCAZP Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11719-MS	T17905.D	1	02/16/15	MT	02/16/15	OP11719	ET796
OP11719-MSD	T17906.D	1	02/16/15	MT	02/16/15	OP11719	ET796
C38530-1	T17907.D	1	02/16/15	MT	02/16/15	OP11719	ET796

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

C38505-1

CAS No.	Compound	C38530-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		9.43	6.0	64	9.43	6.0	64	0	54-108/21
208-96-8	Acenaphthylene	ND		9.43	6.4	68	9.43	5.9	63	8	53-108/22
120-12-7	Anthracene	ND		9.43	5.9	63	9.43	6.3	67	7	58-111/19
56-55-3	Benzo(a)anthracene	ND		9.43	5.8	61	9.43	6.5	69	11	59-120/14
50-32-8	Benzo(a)pyrene	ND		9.43	4.9	52* [a]	9.43	5.2	55	6	53-113/18
205-99-2	Benzo(b)fluoranthene	ND		9.43	5.9	63	9.43	6.6	70	11	57-127/18
191-24-2	Benzo(g,h,i)perylene	ND		9.43	3.9	41* [a]	9.43	4.2	45* [a]	7	52-126/21
207-08-9	Benzo(k)fluoranthene	ND		9.43	4.4	47* [a]	9.43	5.0	53* [a]	13	60-125/16
218-01-9	Chrysene	ND		9.43	5.5	58* [a]	9.43	5.9	63	7	63-120/14
53-70-3	Dibenzo(a,h)anthracene	ND		9.43	3.6	38* [a]	9.43	4.3	46* [a]	18	53-127/22
206-44-0	Fluoranthene	ND		9.43	6.0	64	9.43	6.6	70	10	59-123/17
86-73-7	Fluorene	ND		9.43	6.0	64	9.43	5.9	63	2	57-113/21
193-39-5	Indeno(1,2,3-cd)pyrene	ND		9.43	3.5	37* [a]	9.43	4.4	47* [a]	23* [b]	48-130/22
90-12-0	1-Methylnaphthalene	1.3		9.43	7.4	65	9.43	6.9	59	7	51-104/24
91-57-6	2-Methylnaphthalene	0.78		9.43	7.1	67	9.43	5.8	53	20	52-108/25
91-20-3	Naphthalene	2.0		9.43	8.7	71	9.43	7.8	61	11	51-102/23
85-01-8	Phenanthrene	ND		9.43	5.9	63	9.43	6.1	65	3	58-112/18
129-00-0	Pyrene	ND		9.43	6.1	65	9.43	6.9	73	12	52-124/20

CAS No.	Surrogate Recoveries	MS	MSD	C38530-1	Limits
4165-60-0	Nitrobenzene-d5	82%	74%	84%	42-116%
321-60-8	2-Fluorobiphenyl	90%	81%	89%	44-115%
1718-51-0	Terphenyl-d14	104%	101%	100%	45-141%

(a) Outside control limits due to matrix interference. Emulsion formed during extraction process. AZ:M2
(b) Outside control limits due to matrix interference. Emulsion formed during extraction process. AZ:R9

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9129
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 02/17/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	4.5	13	34.7	<50
Antimony	0.50	.27	.42	0.18	<0.50
Arsenic	1.0	.61	.036	0.16	<1.0
Barium	1.0	.021	.091	0.27	<1.0
Beryllium	0.50		.035	0.0058	<0.50
Boron	5.0	.18	.57	2.6	<5.0
Cadmium	0.50	.0056	.024	0.0058	<0.50
Calcium	500	80	10	39.6	<500
Chromium	4.0	.05	.043	0.0093	<4.0
Cobalt	0.50	.037	.14	-0.0063	<0.50
Copper	4.0	.036	.39	0.28	<4.0
Iron	50	6.2	4.4	2.8	<50
Lead	0.50	.011	.068	-0.00077	<0.50
Magnesium	500	1.1	.79	16.8	<500
Manganese	1.0	.024	.071	0.052	<1.0
Molybdenum	1.0	.23	.46	0.33	<1.0
Nickel	4.0	.35	.12	-0.015	<4.0
Potassium	500	4.7	5.1	6.4	<500
Selenium	1.0	.33	.21	0.091	<1.0
Silver	2.0	.0096	.018	0.0087	<2.0
Sodium	500	4.3	9.7	18.2	<500
Strontium	5.0	.043	.072		
Thallium	0.50	.08	.19	0.046	<0.50
Tin	5.0	.11	.42		
Titanium	1.0	.17	.13		
Vanadium	4.0	.72	.096	0.74	<4.0
Uranium	1.0	.12	.017	0.049	<1.0
Zinc	4.0	.45	.81	1.7	<4.0

Associated samples MP9129: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9129
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original	MS	Spikelot MPIR5	% Rec	QC Limits
Aluminum	49.5	10200	12500	81.2	70-130
Antimony	0.0	520	500	103.9	70-130
Arsenic	1.1	506	500	100.9	70-130
Barium	19.0	544	500	105.0	70-130
Beryllium	0.020	459	500	91.8	70-130
Boron	44.3	522	500	95.5	70-130
Cadmium	0.037	548	500	109.6	70-130
Calcium	31000	39500	12500	88.0	70-130
Chromium	1.2	515	500	102.8	70-130
Cobalt	0.16	479	500	95.8	70-130
Copper	2.0	475	500	94.6	70-130
Iron	0.0	12600	12500	100.7	70-130
Lead	0.041	513	500	102.6	70-130
Magnesium	14400	24400	12500	80.0	70-130
Manganese	6.7	480	500	94.7	70-130
Molybdenum	51.9	569	500	103.4	70-130
Nickel	0.0	530	500	106.0	70-130
Potassium	2190	6510	5000	89.6	70-130
Selenium	1.7	477	500	95.1	70-130
Silver	0.0	475	500	95.0	70-130
Sodium	22900	30400	12500	81.6	70-130
Strontium					
Thallium	0.73	518	500	103.5	70-130
Tin					
Titanium					
Vanadium	3.3	494	500	98.1	70-130
Uranium	12.7	576	500	113.1	70-130
Zinc	32.7	543	500	102.1	70-130

Associated samples MP9129: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9129
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original	MSD	Spikelot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum	49.5	10200	12500	81.2	0.0	20
Antimony	0.0	517	500	103.3	0.6	20
Arsenic	1.1	506	500	100.9	0.0	20
Barium	19.0	539	500	104.0	0.9	20
Beryllium	0.020	460	500	92.0	0.2	20
Boron	44.3	515	500	94.1	1.4	20
Cadmium	0.037	548	500	109.6	0.0	20
Calcium	31000	39200	12500	85.6	0.8	20
Chromium	1.2	525	500	104.8	1.9	20
Cobalt	0.16	483	500	96.6	0.8	20
Copper	2.0	482	500	96.0	1.5	20
Iron	0.0	12600	12500	100.7	0.0	20
Lead	0.041	518	500	103.6	1.0	20
Magnesium	14400	24400	12500	80.0	0.0	20
Manganese	6.7	478	500	94.3	0.4	20
Molybdenum	51.9	569	500	103.4	0.0	20
Nickel	0.0	531	500	106.2	0.2	20
Potassium	2190	6380	5000	87.0	2.0	20
Selenium	1.7	476	500	94.9	0.2	20
Silver	0.0	476	500	95.2	0.2	20
Sodium	22900	30400	12500	81.6	0.0	20
Strontium						
Thallium	0.73	521	500	104.1	0.6	20
Tin						
Titanium						
Vanadium	3.3	498	500	98.9	0.8	20
Uranium	12.7	574	500	112.7	0.3	20
Zinc	32.7	541	500	101.7	0.4	20

Associated samples MP9129: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9129
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 02/17/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum	11300	12500	90.4	85-115
Antimony	522	500	104.4	85-115
Arsenic	528	500	105.6	85-115
Barium	522	500	104.4	85-115
Beryllium	534	500	106.8	85-115
Boron	560	500	112.0	85-115
Cadmium	557	500	111.4	85-115
Calcium	12700	12500	101.6	85-115
Chromium	491	500	98.2	85-115
Cobalt	469	500	93.8	85-115
Copper	469	500	93.8	85-115
Iron	13200	12500	105.6	85-115
Lead	517	500	103.4	85-115
Magnesium	11500	12500	92.0	85-115
Manganese	491	500	98.2	85-115
Molybdenum	510	500	102.0	85-115
Nickel	522	500	104.4	85-115
Potassium	4950	5000	99.0	85-115
Selenium	518	500	103.6	85-115
Silver	484	500	96.8	85-115
Sodium	11300	12500	90.4	85-115
Strontium				
Thallium	523	500	104.6	85-115
Tin				
Titanium				
Vanadium	500	500	100.0	85-115
Uranium	555	500	111.0	85-115
Zinc	506	500	101.2	85-115

Associated samples MP9129: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9129
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum	49.5	82.7	67.0 (a)	0-10
Antimony	0.00	0.00	NC (a)	0-10
Arsenic	1.06	0.853	100.0(a)	0-10
Barium	19.0	18.7	1.7	0-10
Beryllium	0.0204	0.0216	6.3	0-10
Boron	44.3	53.1	19.8*(b)	0-10
Cadmium	0.0366	0.0416	48.5 (a)	0-10
Calcium	31000	33900	19.0*(b)	0-10
Chromium	1.20	0.847	27.9 (a)	0-10
Cobalt	0.164	0.0874	100.0(a)	0-10
Copper	2.00	1.58	20.8*(b)	0-10
Iron	5.32	0.00	100.0(a)	0-10
Lead	0.0409	0.157	137.1(a)	0-10
Magnesium	14400	17100	18.6*(b)	0-10
Manganese	6.67	7.63	14.4*(b)	0-10
Molybdenum	51.9	48.7	6.3	0-10
Nickel	0.245	0.109	NC	0-10
Potassium	2190	2370	16.6*(b)	0-10
Selenium	1.75	1.77	1.2	0-10
Silver	0.00	0.00	NC (a)	0-10
Sodium	22900	23600	16.6*(b)	0-10
Strontium				
Thallium	0.730	0.960	31.5 (a)	0-10
Tin				
Titanium				
Vanadium	3.29	2.30	100.0(a)	0-10
Uranium	12.7	10.0	6.0	0-10
Zinc	32.7	35.2	7.8	0-10

Associated samples MP9129: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9132
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 02/16/15

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.0042	.08	-0.013	<0.20

Associated samples MP9132: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9132
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 02/16/15

Metal	C38505-1F Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.0	2.2	2	110.0	70-130

Associated samples MP9132: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9132
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 02/16/15

Metal	C38505-1F Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.1	2	105.0	4.7	20

Associated samples MP9132: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9132
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 02/16/15

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	2.0	2	100.0	85-115

Associated samples MP9132: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9135
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 02/17/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	13	8.5		
Antimony	6.0	.7	.51		
Arsenic	10	.7	.65		
Barium	200	.4	.35		
Beryllium	5.0	.2	.4		
Boron	100	.9	.64		
Cadmium	2.0	.2	.15		
Calcium	5000	7.1	12		
Chromium	10	.3	.41		
Cobalt	5.0	.2	.3		
Copper	10	1.2	3		
Iron	200	6.4	12		
Lead	10	.7	.85		
Lithium	50		2		
Magnesium	5000	27	36		
Manganese	15	.1	1.3		
Molybdenum	20	.2	.22		
Nickel	5.0	.2	.12		
Potassium	10000	18	44		
Selenium	10	1.8	2.2		
Silicon	100	1.2	6.9	6.0	<100
Silver	5.0	.3	.47		
Sodium	10000	15	13		
Strontium	10	.2	.24		
Thallium	10	.5	.54		
Tin	50	.2	.7		
Titanium	10	.4	.34		
Vanadium	10	.3	.3		
Zinc	20	.3	4.2		

Associated samples MP9135: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9135
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original MS		Spikelot MPIR5	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silicon	25200	25400	250	80.0	70-130
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP9135: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9135
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original	MSD	Spikelot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silicon	25200	25300	250	40.0 (a)	0.4	20
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP9135: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information. AZ:M3

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9135
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 02/17/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon	274	250	109.6	85-115
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP9135: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

QC Batch ID: MP9135
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 02/17/15

Metal	C38505-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon	25200	23300	7.7	0-10
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP9135: C38505-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Northern California
ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN15734	5.0	0.0	mg/l	250	253	101.0	75-125%
Bromide	GP7403/GN15688	0.20	0.0	mg/l	5	4.99	99.8	90-110%
Chloride	GP7403/GN15688	0.50	0.0	mg/l	5	4.82	96.4	90-110%
Cyanide, Total	GP7415/GN15729	0.010	0.0	mg/l	0.100	0.099	98.5	85-115%
Fluoride	GP7403/GN15688	0.10	0.010	mg/l	5	4.94	98.8	90-110%
Nitrogen, Nitrate	GP7403/GN15688	0.10	0.0	mg/l	5	4.82	96.4	90-110%
Nitrogen, Nitrite	GP7403/GN15688	0.10	0.0	mg/l	5	4.95	99.0	90-110%
Solids, Total Dissolved	GN15698	10	0.0	mg/l				
Specific Conductivity	GN15706	1.0	0.0	umhos/cm				
Sulfate	GP7403/GN15688	0.50	0.0	mg/l	5	5.05	101.0	90-110%
Sulfide	GN15711	0.020	0.0	mg/l	0.2	0.20	98.5	75-125%
Total Organic Carbon	GP7449/GN15770	1.0	0.0	mg/l	25	25.6	102.4	75-125%

Associated Samples:
Batch GP7403: C38505-1
Batch GP7415: C38505-1
Batch GP7449: C38505-1
Batch GN15698: C38505-1
Batch GN15706: C38505-1
Batch GN15711: C38505-1
Batch GN15734: C38505-1
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN15734	mg/l	250	258	2.0	
Bromide	GP7403/GN15688	mg/l	5	4.96	0.6	25%
Chloride	GP7403/GN15688	mg/l	5	4.84	0.4	25%
Cyanide, Total	GP7415/GN15729	mg/l	0.100	0.10	2.8	20%
Fluoride	GP7403/GN15688	mg/l	5	4.97	0.6	25%
Nitrogen, Nitrate	GP7403/GN15688	mg/l	5	4.82	0.0	25%
Nitrogen, Nitrite	GP7403/GN15688	mg/l	5	4.96	0.2	25%
Sulfate	GP7403/GN15688	mg/l	5	5.09	0.8	25%
Sulfide	GN15711	mg/l	0.2	0.20	0.0	
Total Organic Carbon	GP7449/GN15770	mg/l	25	25.9	1.2	

Associated Samples:
Batch GP7403: C38505-1
Batch GP7415: C38505-1
Batch GP7449: C38505-1
Batch GN15711: C38505-1
Batch GN15734: C38505-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN15734	C38507-1	mg/l	206	208	1.0	0-25%
Solids, Total Dissolved	GN15698	C38505-1	mg/l	284	307	7.8	0-10%
Specific Conductivity	GN15706	C38505-1	umhos/cm	384	388	1.0	0-10%
pH	GN15695	C38506-1	su	8.24	8.24	0.0	0-25%

Associated Samples:
Batch GN15695: C38505-1
Batch GN15698: C38505-1
Batch GN15706: C38505-1
Batch GN15734: C38505-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP7403/GN15688	C38357-2	mg/l	0.040	5	5.1	101.2	80-120%
Chloride	GP7403/GN15688	C38357-2	mg/l	2.4	10	10.4	80.0	80-120%
Cyanide, Total	GP7415/GN15729	C38460-1	mg/l	0.0071	0.100	0.10	94.5	85-115%
Fluoride	GP7403/GN15688	C38357-2	mg/l	0.050	5	5.1	101.0	80-120%
Nitrogen, Nitrate	GP7403/GN15688	C38357-2	mg/l	0.26	5	5.3	100.8	80-120%
Nitrogen, Nitrite	GP7403/GN15688	C38357-2	mg/l	0.020	5	5.0	99.6	80-120%
Sulfide	GN15711	C38505-1	mg/l	0.0	0.2	0.17	84.8	75-125%
Total Organic Carbon	GP7449/GN15770	C38505-1	mg/l	1.1	25	26.2	100.7	75-125%

Associated Samples:
Batch GP7403: C38505-1
Batch GP7415: C38505-1
Batch GP7449: C38505-1
Batch GN15711: C38505-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C38505
Account: EXLMCAZP - Excelsior Mining Corporation
Project: Excelsior/Gunnison GW Testing

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP7403/GN15688	C38357-2	mg/l	0.040	5	5.1	0.6	
Chloride	GP7403/GN15688	C38357-2	mg/l	2.4	10	10.4	0.0	
Cyanide, Total	GP7415/GN15729	C38460-1	mg/l	0.0071	0.100	0.10	0.6	20%
Fluoride	GP7403/GN15688	C38357-2	mg/l	0.050	5	5.1	0.0	
Nitrogen, Nitrate	GP7403/GN15688	C38357-2	mg/l	0.26	5	5.3	0.0	
Nitrogen, Nitrite	GP7403/GN15688	C38357-2	mg/l	0.020	5	5.1	2.0	
Sulfide	GN15711	C38505-1	mg/l	0.0	0.2	0.17	0.3	25%

Associated Samples:
Batch GP7403: C38505-1
Batch GP7415: C38505-1
Batch GP7449: C38505-1
Batch GN15711: C38505-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

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Est. 1970

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

Report Summary

Friday February 20, 2015

Report Number: L749126
Samples Received: 02/14/15
Client Project: 38681

Description: Excelsior

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards
Daphne Richards , ESC Representative

Laboratory Certification Numbers

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-01

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-14

Collected By : Adam Kneeling
Collection Date : 02/11/15 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.25	mg/l	8260B	02/20/15	5
Acrylonitrile	BDL	0.050	mg/l	8260B	02/20/15	5
Benzene	0.0073	0.0050	mg/l	8260B	02/20/15	5
Bromobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
Bromochloromethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Bromodichloromethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Bromoform	BDL	0.0050	mg/l	8260B	02/20/15	5
Bromomethane	BDL	0.025	mg/l	8260B	02/20/15	5
n-Butylbenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
sec-Butylbenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
tert-Butylbenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
Carbon tetrachloride	BDL	0.0050	mg/l	8260B	02/20/15	5
Carbon disulfide	BDL	0.0050	mg/l	8260B	02/20/15	5
Chlorobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
Chlorodibromomethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Chloroethane	BDL	0.025	mg/l	8260B	02/20/15	5
Chloroform	BDL	0.025	mg/l	8260B	02/20/15	5
Chloromethane	BDL	0.012	mg/l	8260B	02/20/15	5
1,2-Dibromo-3-Chloropropane	BDL	0.025	mg/l	8260B	02/20/15	5
1,2-Dibromoethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Dibromomethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,2-Dichlorobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
1,3-Dichlorobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
1,4-Dichlorobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
trans-1,4-Dichloro-2-butene	BDL	0.012	mg/l	8260B	02/20/15	5
Dichlorodifluoromethane	BDL	0.025	mg/l	8260B	02/20/15	5
1,1-Dichloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,2-Dichloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1-Dichloroethene	BDL	0.0050	mg/l	8260B	02/20/15	5
cis-1,2-Dichloroethene	BDL	0.0050	mg/l	8260B	02/20/15	5
trans-1,2-Dichloroethene	BDL	0.0050	mg/l	8260B	02/20/15	5
1,2-Dichloropropane	BDL	0.0050	mg/l	8260B	02/20/15	5
cis-1,3-Dichloropropene	BDL	0.0050	mg/l	8260B	02/20/15	5
trans-1,3-Dichloropropene	BDL	0.0050	mg/l	8260B	02/20/15	5
Ethylbenzene	0.030	0.0050	mg/l	8260B	02/20/15	5
Hexachloro-1,3-butadiene	BDL	0.0050	mg/l	8260B	02/20/15	5
2-Hexanone	BDL	0.050	mg/l	8260B	02/20/15	5
2-Butanone (MEK)	BDL	0.050	mg/l	8260B	02/20/15	5
Iodomethane	BDL	0.050	mg/l	8260B	02/20/15	5
Methylene Chloride	BDL	0.025	mg/l	8260B	02/20/15	5
4-Methyl-2-pentanone (MIBK)	BDL	0.050	mg/l	8260B	02/20/15	5
Naphthalene	0.29	0.025	mg/l	8260B	02/20/15	5
n-Propylbenzene	0.0071	0.0050	mg/l	8260B	02/20/15	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-01

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-14

Collected By : Adam Kneeling
Collection Date : 02/11/15 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Styrene	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1,1,2-Tetrachloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1,2,2-Tetrachloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1,2-Trichlorotrifluoroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Tetrachloroethene	BDL	0.0050	mg/l	8260B	02/20/15	5
Toluene	0.044	0.025	mg/l	8260B	02/20/15	5
1,2,4-Trichlorobenzene	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1,1-Trichloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
1,1,2-Trichloroethane	BDL	0.0050	mg/l	8260B	02/20/15	5
Trichloroethene	BDL	0.0050	mg/l	8260B	02/20/15	5
Trichlorofluoromethane	BDL	0.025	mg/l	8260B	02/20/15	5
1,2,3-Trichloropropane	BDL	0.012	mg/l	8260B	02/20/15	5
1,2,4-Trimethylbenzene	0.060	0.0050	mg/l	8260B	02/20/15	5
1,3,5-Trimethylbenzene	0.012	0.0050	mg/l	8260B	02/20/15	5
Vinyl acetate	BDL	0.050	mg/l	8260B	02/20/15	5
Vinyl chloride	BDL	0.0050	mg/l	8260B	02/20/15	5
Xylenes, Total	0.090	0.015	mg/l	8260B	02/20/15	5
Di-isopropyl ether	BDL	0.0050	mg/l	8260B	02/20/15	5
Ethanol	BDL	0.50	mg/l	8260B	02/20/15	5
Ethyl tert-butyl ether	BDL	0.0050	mg/l	8260B	02/20/15	5
Methyl tert-butyl ether	BDL	0.0050	mg/l	8260B	02/20/15	5
tert-Butyl alcohol	BDL	0.025	mg/l	8260B	02/20/15	5
tert-Amyl Methyl Ether	BDL	0.0050	mg/l	8260B	02/20/15	5
Surrogate Recovery						
Toluene-d8	96.6		% Rec.	8260B	02/20/15	1
Dibromofluoromethane	87.7		% Rec.	8260B	02/20/15	1
4-Bromofluorobenzene	104.		% Rec.	8260B	02/20/15	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.012	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthene	0.013	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthylene	0.0035	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(b)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(g,h,i)perylene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(k)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Chrysene	0.00021	0.000050	mg/l	8270C-SIM	02/17/15	1
Dibenz(a,h)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluorene	0.027	0.000050	mg/l	8270C-SIM	02/17/15	1
Indeno(1,2,3-cd)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Naphthalene	0.51	0.0050	mg/l	8270C-SIM	02/19/15	20
Phenanthrene	0.086	0.000050	mg/l	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-01

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-14

Collected By : Adam Kneeling
Collection Date : 02/11/15 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	0.0016	0.000050	mg/l	8270C-SIM	02/17/15	1
1-Methylnaphthalene	0.69	0.0050	mg/l	8270C-SIM	02/19/15	20
2-Methylnaphthalene	1.0	0.0050	mg/l	8270C-SIM	02/19/15	20
2-Chloronaphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
Surrogate Recovery						
Nitrobenzene-d5	1420		% Rec.	8270C-SIM	02/19/15	20
2-Fluorobiphenyl	94.0		% Rec.	8270C-SIM	02/17/15	1
p-Terphenyl-d14	112.		% Rec.	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 02/20/15 14:00 Printed: 02/20/15 14:00

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-02

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-10

Collected By : Adam Kneeling
Collection Date : 02/11/15 13:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	2.5	mg/l	8260B	02/20/15	50
Acrylonitrile	BDL	0.50	mg/l	8260B	02/20/15	50
Benzene	0.31	0.050	mg/l	8260B	02/20/15	50
Bromobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
Bromochloromethane	BDL	0.050	mg/l	8260B	02/20/15	50
Bromodichloromethane	BDL	0.050	mg/l	8260B	02/20/15	50
Bromoform	BDL	0.050	mg/l	8260B	02/20/15	50
Bromomethane	BDL	0.25	mg/l	8260B	02/20/15	50
n-Butylbenzene	BDL	0.050	mg/l	8260B	02/20/15	50
sec-Butylbenzene	BDL	0.050	mg/l	8260B	02/20/15	50
tert-Butylbenzene	BDL	0.050	mg/l	8260B	02/20/15	50
Carbon tetrachloride	BDL	0.050	mg/l	8260B	02/20/15	50
Carbon disulfide	BDL	0.050	mg/l	8260B	02/20/15	50
Chlorobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
Chlorodibromomethane	BDL	0.050	mg/l	8260B	02/20/15	50
Chloroethane	BDL	0.25	mg/l	8260B	02/20/15	50
Chloroform	BDL	0.25	mg/l	8260B	02/20/15	50
Chloromethane	BDL	0.12	mg/l	8260B	02/20/15	50
1,2-Dibromo-3-Chloropropane	BDL	0.25	mg/l	8260B	02/20/15	50
1,2-Dibromoethane	BDL	0.050	mg/l	8260B	02/20/15	50
Dibromomethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,2-Dichlorobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
1,3-Dichlorobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
1,4-Dichlorobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
trans-1,4-Dichloro-2-butene	BDL	0.12	mg/l	8260B	02/20/15	50
Dichlorodifluoromethane	BDL	0.25	mg/l	8260B	02/20/15	50
1,1-Dichloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,2-Dichloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,1-Dichloroethene	BDL	0.050	mg/l	8260B	02/20/15	50
cis-1,2-Dichloroethene	BDL	0.050	mg/l	8260B	02/20/15	50
trans-1,2-Dichloroethene	BDL	0.050	mg/l	8260B	02/20/15	50
1,2-Dichloropropane	BDL	0.050	mg/l	8260B	02/20/15	50
cis-1,3-Dichloropropene	BDL	0.050	mg/l	8260B	02/20/15	50
trans-1,3-Dichloropropene	BDL	0.050	mg/l	8260B	02/20/15	50
Ethylbenzene	0.11	0.050	mg/l	8260B	02/20/15	50
Hexachloro-1,3-butadiene	BDL	0.050	mg/l	8260B	02/20/15	50
2-Hexanone	BDL	0.50	mg/l	8260B	02/20/15	50
2-Butanone (MEK)	BDL	0.50	mg/l	8260B	02/20/15	50
Iodomethane	BDL	0.50	mg/l	8260B	02/20/15	50
Methylene Chloride	BDL	0.25	mg/l	8260B	02/20/15	50
4-Methyl-2-pentanone (MIBK)	BDL	0.50	mg/l	8260B	02/20/15	50
Naphthalene	0.32	0.25	mg/l	8260B	02/20/15	50
n-Propylbenzene	BDL	0.050	mg/l	8260B	02/20/15	50

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-02

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-10

Collected By : Adam Kneeling
Collection Date : 02/11/15 13:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Styrene	BDL	0.050	mg/l	8260B	02/20/15	50
1,1,1,2-Tetrachloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,1,2,2-Tetrachloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,1,2-Trichlorotrifluoroethane	BDL	0.050	mg/l	8260B	02/20/15	50
Tetrachloroethene	BDL	0.050	mg/l	8260B	02/20/15	50
Toluene	0.68	0.25	mg/l	8260B	02/20/15	50
1,2,4-Trichlorobenzene	BDL	0.050	mg/l	8260B	02/20/15	50
1,1,1-Trichloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
1,1,2-Trichloroethane	BDL	0.050	mg/l	8260B	02/20/15	50
Trichloroethene	BDL	0.050	mg/l	8260B	02/20/15	50
Trichlorofluoromethane	BDL	0.25	mg/l	8260B	02/20/15	50
1,2,3-Trichloropropane	BDL	0.12	mg/l	8260B	02/20/15	50
1,2,4-Trimethylbenzene	0.11	0.050	mg/l	8260B	02/20/15	50
1,3,5-Trimethylbenzene	BDL	0.050	mg/l	8260B	02/20/15	50
Vinyl acetate	BDL	0.50	mg/l	8260B	02/20/15	50
Vinyl chloride	BDL	0.050	mg/l	8260B	02/20/15	50
Xylenes, Total	0.50	0.15	mg/l	8260B	02/20/15	50
Di-isopropyl ether	BDL	0.050	mg/l	8260B	02/20/15	50
Ethanol	BDL	5.0	mg/l	8260B	02/20/15	50
Ethyl tert-butyl ether	BDL	0.050	mg/l	8260B	02/20/15	50
Methyl tert-butyl ether	BDL	0.050	mg/l	8260B	02/20/15	50
tert-Butyl alcohol	BDL	0.25	mg/l	8260B	02/20/15	50
tert-Amyl Methyl Ether	BDL	0.050	mg/l	8260B	02/20/15	50
Surrogate Recovery						
Toluene-d8	96.4		% Rec.	8260B	02/20/15	1
Dibromofluoromethane	86.2		% Rec.	8260B	02/20/15	1
4-Bromofluorobenzene	105.		% Rec.	8260B	02/20/15	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.0048	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthene	0.0066	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthylene	0.0017	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(b)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(g,h,i)perylene	0.000052	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(k)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Chrysene	0.000067	0.000050	mg/l	8270C-SIM	02/17/15	1
Dibenz(a,h)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluoranthene	0.00015	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluorene	0.016	0.000050	mg/l	8270C-SIM	02/17/15	1
Indeno(1,2,3-cd)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Naphthalene	0.33	0.0050	mg/l	8270C-SIM	02/19/15	20
Phenanthrene	0.034	0.000050	mg/l	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-02

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : CS-10

Collected By : Adam Kneeling
Collection Date : 02/11/15 13:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	0.00096	0.000050	mg/l	8270C-SIM	02/17/15	1
1-Methylnaphthalene	0.33	0.0050	mg/l	8270C-SIM	02/19/15	20
2-Methylnaphthalene	0.46	0.0050	mg/l	8270C-SIM	02/19/15	20
2-Chloronaphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
Surrogate Recovery						
Nitrobenzene-d5	86.1		% Rec.	8270C-SIM	02/19/15	20
2-Fluorobiphenyl	84.7		% Rec.	8270C-SIM	02/17/15	1
p-Terphenyl-d14	125.		% Rec.	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 02/20/15 14:00 Printed: 02/20/15 14:00

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-03

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : NSM-003

Collected By : Adam Kneeling
Collection Date : 02/11/15 17:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	02/20/15	1
Acrylonitrile	BDL	0.010	mg/l	8260B	02/20/15	1
Benzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Bromobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Bromoform	BDL	0.0010	mg/l	8260B	02/20/15	1
Bromomethane	BDL	0.0050	mg/l	8260B	02/20/15	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	02/20/15	1
Carbon disulfide	BDL	0.0010	mg/l	8260B	02/20/15	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Chloroethane	BDL	0.0050	mg/l	8260B	02/20/15	1
Chloroform	BDL	0.0050	mg/l	8260B	02/20/15	1
Chloromethane	BDL	0.0025	mg/l	8260B	02/20/15	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	02/20/15	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Dibromomethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
trans-1,4-Dichloro-2-butene	BDL	0.0025	mg/l	8260B	02/20/15	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	02/20/15	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	02/20/15	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	02/20/15	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	02/20/15	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	02/20/15	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	02/20/15	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	02/20/15	1
2-Hexanone	BDL	0.010	mg/l	8260B	02/20/15	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	02/20/15	1
Iodomethane	BDL	0.010	mg/l	8260B	02/20/15	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	02/20/15	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	02/20/15	1
Naphthalene	BDL	0.0050	mg/l	8260B	02/20/15	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-03

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : NSM-003

Collected By : Adam Kneeling
Collection Date : 02/11/15 17:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Styrene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1,2-Trichlorotrifluoroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	02/20/15	1
Toluene	BDL	0.0050	mg/l	8260B	02/20/15	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	02/20/15	1
Trichloroethene	BDL	0.0010	mg/l	8260B	02/20/15	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	02/20/15	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	02/20/15	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	02/20/15	1
Vinyl acetate	BDL	0.010	mg/l	8260B	02/20/15	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	02/20/15	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	02/20/15	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	02/20/15	1
Ethanol	BDL	0.10	mg/l	8260B	02/20/15	1
Ethyl tert-butyl ether	BDL	0.0010	mg/l	8260B	02/20/15	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	02/20/15	1
tert-Butyl alcohol	0.029	0.0050	mg/l	8260B	02/20/15	1
tert-Amyl Methyl Ether	BDL	0.0010	mg/l	8260B	02/20/15	1
Surrogate Recovery						
Toluene-d8	97.3		% Rec.	8260B	02/20/15	1
Dibromofluoromethane	87.6		% Rec.	8260B	02/20/15	1
4-Bromofluorobenzene	106.		% Rec.	8260B	02/20/15	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Acenaphthylene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(a)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(b)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(g,h,i)perylene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Benzo(k)fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Chrysene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Dibenz(a,h)anthracene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluoranthene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Fluorene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Indeno(1,2,3-cd)pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
Naphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
Phenanthrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

February 20, 2015

ESC Sample # : L749126-03

Site ID :

Project # : 38681

Date Received : February 14, 2015
Description : Excelsior

Sample ID : NSM-003

Collected By : Adam Kneeling
Collection Date : 02/11/15 17:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	BDL	0.000050	mg/l	8270C-SIM	02/17/15	1
1-Methylnaphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
2-Methylnaphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
2-Chloronaphthalene	BDL	0.00025	mg/l	8270C-SIM	02/17/15	1
Surrogate Recovery						
Nitrobenzene-d5	110.		% Rec.	8270C-SIM	02/17/15	1
2-Fluorobiphenyl	114.		% Rec.	8270C-SIM	02/17/15	1
p-Terphenyl-d14	98.0		% Rec.	8270C-SIM	02/17/15	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 02/20/15 14:00 Printed: 02/20/15 14:00

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L749126-01	WG771220	SAMP	cis-1,3-Dichloropropene	R3020849	J4
	WG771220	SAMP	Vinyl acetate	R3020849	J4
	WG770655	SAMP	Nitrobenzene-d5	R3020652	J1
L749126-02	WG771220	SAMP	cis-1,3-Dichloropropene	R3020849	J4
	WG771220	SAMP	Vinyl acetate	R3020849	J4
L749126-03	WG771220	SAMP	cis-1,3-Dichloropropene	R3020849	J4
	WG771220	SAMP	Vinyl acetate	R3020849	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Quality Control Summary
SDG: L763326

For: Haley & Aldrich - AZ
Excelsior

L763326

Lab SampleID.	Client ID
L763326-01	NSH-022-050415
L763326-02	TRIP BLANK
L763326-03	NSH-022-050415
L763326-04	TRIP BLANK

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Quality Control Summary
SDG: L763326

For: Haley & Aldrich - AZ
Project: Excelsior
May 20, 2015

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Volatile Organic Compounds by Method 8260B and 524.2

Laboratory Control Sample

Samples L763326-01 and 02 were analyzed in analytical batch WG788839. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Sample L763326-01 was analyzed in analytical batch WG789359. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Samples L763326-03 and 04 were analyzed in analytical batch WG787309**.**

Samples L763326-03 was analyzed in analytical batch WG788981**.**

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG788839 matrix spike/matrix spike duplicate analysis was performed on sample L763681-02. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

Precision for batch WG789359 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. McLain
ESC Representative
ESC Lab Sciences

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Tax I.D. 62-0814289

Est. 1970

Adam Kneeling
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

Report Summary

Wednesday May 20, 2015

Report Number: L763326
Samples Received: 05/06/15
Client Project: 38681

Description: Excelsior

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards
Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Est. 1970

Quality Control Summary
SDG: L763326

For: Haley & Aldrich - AZ
Excelsior

L763326

Lab SampleID.	Client ID
L763326-01	NSH-022-050415
L763326-02	TRIP BLANK
L763326-03	NSH-022-050415
L763326-04	TRIP BLANK

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SAMPLE NUMBER
NSH-022-050415

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-01**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:30 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
107-02-8	Acrolein	0.050	< 0.050	
107-13-1	Acrylonitrile	0.010	< 0.010	
71-43-2	Benzene	0.0010	< 0.0010	
108-86-1	Bromobenzene	0.0010	< 0.0010	
75-27-4	Bromodichloromethane	0.0010	< 0.0010	
75-25-2	Bromoform	0.0010	< 0.0010	
74-83-9	Bromomethane	0.0050	< 0.0050	
106-99-0	1,3-Butadiene	0.0020	< 0.0020	
104-51-8	n-Butylbenzene	0.0010	< 0.0010	
135-98-8	sec-Butylbenzene	0.0010	< 0.0010	
98-06-6	tert-Butylbenzene	0.0010	< 0.0010	
56-23-5	Carbon tetrachloride	0.0010	< 0.0010	
75-15-0	Carbon disulfide	0.0010	< 0.0010	
108-90-7	Chlorobenzene	0.0010	< 0.0010	
124-48-1	Chlorodibromomethane	0.0010	< 0.0010	
75-00-3	Chloroethane	0.0050	< 0.0050	
67-66-3	Chloroform	0.0050	< 0.0050	
74-87-3	Chloromethane	0.0025	< 0.0025	
110-82-7	Cyclohexane	0.0010	< 0.0010	
95-49-8	2-Chlorotoluene	0.0010	< 0.0010	
106-43-4	4-Chlorotoluene	0.0010	< 0.0010	
96-12-8	1,2-Dibromo-3-Chloropropane	0.0050	< 0.0050	
106-93-4	1,2-Dibromoethane	0.0010	< 0.0010	
74-95-3	Dibromomethane	0.0010	< 0.0010	
95-50-1	1,2-Dichlorobenzene	0.0010	< 0.0010	
541-73-1	1,3-Dichlorobenzene	0.0010	< 0.0010	
106-46-7	1,4-Dichlorobenzene	0.0010	< 0.0010	
75-71-8	Dichlorodifluoromethane	0.0050	< 0.0050	
75-34-3	1,1-Dichloroethane	0.0010	< 0.0010	
107-06-2	1,2-Dichloroethane	0.0010	< 0.0010	
75-35-4	1,1-Dichloroethene	0.0010	< 0.0010	
156-59-2	cis-1,2-Dichloroethene	0.0010	< 0.0010	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
NSH-022-050415

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-01**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:30 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
156-60-5	trans-1,2-Dichloroethene	0.0010	< 0.0010	
78-87-5	1,2-Dichloropropane	0.0010	< 0.0010	
563-58-6	1,1-Dichloropropene	0.0010	< 0.0010	
142-28-9	1,3-Dichloropropane	0.0010	< 0.0010	
10061-01-5	cis-1,3-Dichloropropene	0.0010	< 0.0010	
10061-02-6	trans-1,3-Dichloropropene	0.0010	< 0.0010	
594-20-7	2,2-Dichloropropane	0.0010	< 0.0010	
77-73-6	Dicyclopentadiene	0.0010	< 0.0010	
108-20-3	Di-isopropyl ether	0.0010	< 0.0010	
100-41-4	Ethylbenzene	0.0010	< 0.0010	
622-96-8	4-Ethyltoluene	0.0010	< 0.0010	
87-68-3	Hexachloro-1,3-butadiene	0.0010	< 0.0010	
110-54-3	n-Hexane	0.010	< 0.010	
98-82-8	Isopropylbenzene	0.0010	< 0.0010	
99-87-6	p-Isopropyltoluene	0.0010	< 0.0010	
78-93-3	2-Butanone (MEK)	0.010	< 0.010	
108-87-2	Methyl Cyclohexane	0.0010	< 0.0010	
75-09-2	Methylene Chloride	0.0050	< 0.0050	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.010	< 0.010	
1634-04-4	Methyl tert-butyl ether	0.0010	< 0.0010	
91-20-3	Naphthalene	0.0050	< 0.0050	
115-07-1	Propene	0.0025	**0.0032**	
103-65-1	n-Propylbenzene	0.0010	< 0.0010	
100-42-5	Styrene	0.0010	< 0.0010	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010	< 0.0010	
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	< 0.0010	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.0010	< 0.0010	
127-18-4	Tetrachloroethene	0.0010	< 0.0010	
87-61-6	1,2,3-Trichlorobenzene	0.0010	< 0.0010	
120-82-1	1,2,4-Trichlorobenzene	0.0010	< 0.0010	
71-55-6	1,1,1-Trichloroethane	0.0010	< 0.0010	
79-00-5	1,1,2-Trichloroethane	0.0010	< 0.0010	
79-01-6	Trichloroethene	0.0010	< 0.0010	

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SAMPLE NUMBER
NSH-022-050415

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-01**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:30 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
75-69-4	Trichlorofluoromethane	0.0050	< 0.0050	
96-18-4	1,2,3-Trichloropropane	0.0025	< 0.0025	
95-63-6	1,2,4-Trimethylbenzene	0.0010	< 0.0010	
526-73-8	1,2,3-Trimethylbenzene	0.0010	< 0.0010	
108-67-8	1,3,5-Trimethylbenzene	0.0010	< 0.0010	
75-01-4	Vinyl chloride	0.0010	< 0.0010	
1330-20-7	Xylenes, Total	0.0030	< 0.0030	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
Toluene-d8	**102**		
Dibromofluoromethane	**103**		
4-Bromofluorobenzene	**105**		

8260B

Analytic Batch: WG789359 | Analysis Date: 5/15/2015 | Analysis Time: 3:57 PM
Instrument: VOCMS2 | Analyst: 621 | Preparation Date: 5/15/2015 4:22
Method: 8260B | Dilution: 25

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
108-88-3	Toluene	0.12	**1.4**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
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Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-02**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:53 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
107-02-8	Acrolein	0.050	< 0.050	
107-13-1	Acrylonitrile	0.010	< 0.010	
71-43-2	Benzene	0.0010	< 0.0010	
108-86-1	Bromobenzene	0.0010	< 0.0010	
75-27-4	Bromodichloromethane	0.0010	< 0.0010	
75-25-2	Bromoform	0.0010	< 0.0010	
74-83-9	Bromomethane	0.0050	< 0.0050	
106-99-0	1,3-Butadiene	0.0020	< 0.0020	
104-51-8	n-Butylbenzene	0.0010	< 0.0010	
135-98-8	sec-Butylbenzene	0.0010	< 0.0010	
98-06-6	tert-Butylbenzene	0.0010	< 0.0010	
56-23-5	Carbon tetrachloride	0.0010	< 0.0010	
75-15-0	Carbon disulfide	0.0010	< 0.0010	
108-90-7	Chlorobenzene	0.0010	< 0.0010	
124-48-1	Chlorodibromomethane	0.0010	< 0.0010	
75-00-3	Chloroethane	0.0050	< 0.0050	
67-66-3	Chloroform	0.0050	< 0.0050	
74-87-3	Chloromethane	0.0025	< 0.0025	
110-82-7	Cyclohexane	0.0010	< 0.0010	
95-49-8	2-Chlorotoluene	0.0010	< 0.0010	
106-43-4	4-Chlorotoluene	0.0010	< 0.0010	
96-12-8	1,2-Dibromo-3-Chloropropane	0.0050	< 0.0050	
106-93-4	1,2-Dibromoethane	0.0010	< 0.0010	
74-95-3	Dibromomethane	0.0010	< 0.0010	
95-50-1	1,2-Dichlorobenzene	0.0010	< 0.0010	
541-73-1	1,3-Dichlorobenzene	0.0010	< 0.0010	
106-46-7	1,4-Dichlorobenzene	0.0010	< 0.0010	
75-71-8	Dichlorodifluoromethane	0.0050	< 0.0050	
75-34-3	1,1-Dichloroethane	0.0010	< 0.0010	
107-06-2	1,2-Dichloroethane	0.0010	< 0.0010	
75-35-4	1,1-Dichloroethene	0.0010	< 0.0010	
156-59-2	cis-1,2-Dichloroethene	0.0010	< 0.0010	

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SAMPLE NUMBER
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Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-02**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:53 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
156-60-5	trans-1,2-Dichloroethene	0.0010	< 0.0010	
78-87-5	1,2-Dichloropropane	0.0010	< 0.0010	
563-58-6	1,1-Dichloropropene	0.0010	< 0.0010	
142-28-9	1,3-Dichloropropane	0.0010	< 0.0010	
10061-01-5	cis-1,3-Dichloropropene	0.0010	< 0.0010	
10061-02-6	trans-1,3-Dichloropropene	0.0010	< 0.0010	
594-20-7	2,2-Dichloropropane	0.0010	< 0.0010	
77-73-6	Dicyclopentadiene	0.0010	< 0.0010	
108-20-3	Di-isopropyl ether	0.0010	< 0.0010	
100-41-4	Ethylbenzene	0.0010	< 0.0010	
622-96-8	4-Ethyltoluene	0.0010	< 0.0010	
87-68-3	Hexachloro-1,3-butadiene	0.0010	< 0.0010	
110-54-3	n-Hexane	0.010	< 0.010	
98-82-8	Isopropylbenzene	0.0010	< 0.0010	
99-87-6	p-Isopropyltoluene	0.0010	< 0.0010	
78-93-3	2-Butanone (MEK)	0.010	< 0.010	
108-87-2	Methyl Cyclohexane	0.0010	< 0.0010	
75-09-2	Methylene Chloride	0.0050	< 0.0050	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.010	< 0.010	
1634-04-4	Methyl tert-butyl ether	0.0010	< 0.0010	
91-20-3	Naphthalene	0.0050	< 0.0050	
115-07-1	Propene	0.0025	< 0.0025	
103-65-1	n-Propylbenzene	0.0010	< 0.0010	
100-42-5	Styrene	0.0010	< 0.0010	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010	< 0.0010	
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	< 0.0010	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.0010	< 0.0010	
127-18-4	Tetrachloroethene	0.0010	< 0.0010	
108-88-3	Toluene	0.0050	< 0.0050	
87-61-6	1,2,3-Trichlorobenzene	0.0010	< 0.0010	
120-82-1	1,2,4-Trichlorobenzene	0.0010	< 0.0010	
71-55-6	1,1,1-Trichloroethane	0.0010	< 0.0010	
79-00-5	1,1,2-Trichloroethane	0.0010	< 0.0010	

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SAMPLE NUMBER
TRIP BLANK

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-02**	Date Received :	5/6/2015

8260B

Analytic Batch: WG788839 | Analysis Date: 5/14/2015 | Analysis Time: 1:53 PM
Instrument: VOCMS30 | Analyst: 621 | Preparation Date: 5/13/2015 10:00
Method: 8260B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
79-01-6	Trichloroethene	0.0010	< 0.0010	
75-69-4	Trichlorofluoromethane	0.0050	< 0.0050	
96-18-4	1,2,3-Trichloropropane	0.0025	< 0.0025	
95-63-6	1,2,4-Trimethylbenzene	0.0010	< 0.0010	
526-73-8	1,2,3-Trimethylbenzene	0.0010	< 0.0010	
108-67-8	1,3,5-Trimethylbenzene	0.0010	< 0.0010	
75-01-4	Vinyl chloride	0.0010	< 0.0010	
1330-20-7	Xylenes, Total	0.0030	< 0.0030	

Surrogates

	Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
	Toluene-d8	**103**		
	Dibromofluoromethane	**104**		
	4-Bromofluorobenzene	**102**		

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
NSH-022-050415

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-03**	Date Received :	5/6/2015

Analytic Batch: WG787309 | Analysis Date: 5/7/2015 | Analysis Time: 4:23 PM
Instrument: VOCMS19 | Analyst: 74 | Preparation Date: 5/7/2015 10:45
Method: | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
71-43-2	Benzene	0.00050	< 0.00050	
56-23-5	Carbon tetrachloride	0.00050	< 0.00050	
106-46-7	1,4-Dichlorobenzene	0.00050	< 0.00050	
107-06-2	1,2-Dichloroethane	0.00050	< 0.00050	
75-35-4	1,1-Dichloroethene	0.00050	< 0.00050	
71-55-6	1,1,1-Trichloroethane	0.00050	< 0.00050	
79-01-6	Trichloroethene	0.00050	< 0.00050	
75-01-4	Vinyl chloride	0.00050	< 0.00050	
120-82-1	1,2,4-Trichlorobenzene	0.00050	< 0.00050	
156-59-2	cis-1,2-Dichloroethene	0.00050	< 0.00050	
1330-20-7	Xylenes, Total	0.00050	< 0.00050	
75-09-2	Methylene chloride	0.00050	< 0.00050	
95-50-1	1,2-Dichlorobenzene	0.00050	< 0.00050	
156-60-5	trans-1,2-Dichloroethene	0.00050	< 0.00050	
78-87-5	1,2-Dichloropropane	0.00050	< 0.00050	
79-00-5	1,1,2-Trichloroethane	0.00050	< 0.00050	
127-18-4	Tetrachloroethene	0.00050	< 0.00050	
108-90-7	Chlorobenzene	0.00050	< 0.00050	
100-41-4	Ethylbenzene	0.00050	< 0.00050	
100-42-5	Styrene	0.00050	< 0.00050	
108-86-1	Bromobenzene	0.00050	< 0.00050	
75-27-4	Bromodichloromethane	0.00050	< 0.00050	
75-25-2	Bromoform	0.00050	< 0.00050	
74-83-9	Bromomethane	0.00050	< 0.00050	
124-48-1	Chlorodibromomethane	0.00050	< 0.00050	
75-00-3	Chloroethane	0.00050	< 0.00050	
67-66-3	Chloroform	0.00050	< 0.00050	
74-87-3	Chloromethane	0.00050	< 0.00050	
95-49-8	2-Chlorotoluene	0.00050	< 0.00050	
106-43-4	4-Chlorotoluene	0.00050	< 0.00050	
74-95-3	Dibromomethane	0.00050	< 0.00050	
541-73-1	1,3-Dichlorobenzene	0.00050	< 0.00050	
75-34-3	1,1-Dichloroethane	0.00050	< 0.00050	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
NSH-022-050415

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-03**	Date Received :	5/6/2015

524.2

Analytic Batch: WG787309 | Analysis Date: 5/7/2015 | Analysis Time: 4:23 PM
Instrument: VOCMS19 | Analyst: 74 | Preparation Date: 5/7/2015 10:45
Method: 524.2 | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
142-28-9	1,3-Dichloropropane	0.00050	< 0.00050	
594-20-7	2,2-Dichloropropane	0.00050	< 0.00050	
563-58-6	1,1-Dichloropropene	0.00050	< 0.00050	
542-75-6	1,3-Dichloropropene	0.00050	< 0.00050	
630-20-6	1,1,1,2-Tetrachloroethane	0.00050	< 0.00050	
79-34-5	1,1,2,2-Tetrachloroethane	0.00050	< 0.00050	
96-18-4	1,2,3-Trichloropropane	0.00050	< 0.00050	

524.2

Analytic Batch: WG788981 | Analysis Date: 5/14/2015 | Analysis Time: 2:32 PM
Instrument: VOCMS19 | Analyst: 74 | Preparation Date: 5/14/2015 2:14
Method: 524.2 | Dilution: 10

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
108-88-3	Toluene	0.0050	**1.1**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
TRIP BLANK

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-04**	Date Received :	5/6/2015

Analytic Batch: WG787309 Analysis Date: 5/7/2015 Analysis Time: 4:52 PM
Instrument: VOCMS19 Analyst: 74 Preparation Date: 5/7/2015 10:45
Method: Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
71-43-2	Benzene	0.00050	< 0.00050	
56-23-5	Carbon tetrachloride	0.00050	< 0.00050	
106-46-7	1,4-Dichlorobenzene	0.00050	< 0.00050	
107-06-2	1,2-Dichloroethane	0.00050	< 0.00050	
75-35-4	1,1-Dichloroethene	0.00050	< 0.00050	
71-55-6	1,1,1-Trichloroethane	0.00050	< 0.00050	
79-01-6	Trichloroethene	0.00050	< 0.00050	
75-01-4	Vinyl chloride	0.00050	< 0.00050	
120-82-1	1,2,4-Trichlorobenzene	0.00050	< 0.00050	
156-59-2	cis-1,2-Dichloroethene	0.00050	< 0.00050	
1330-20-7	Xylenes, Total	0.00050	< 0.00050	
75-09-2	Methylene chloride	0.00050	< 0.00050	
95-50-1	1,2-Dichlorobenzene	0.00050	< 0.00050	
156-60-5	trans-1,2-Dichloroethene	0.00050	< 0.00050	
78-87-5	1,2-Dichloropropane	0.00050	< 0.00050	
79-00-5	1,1,2-Trichloroethane	0.00050	< 0.00050	
127-18-4	Tetrachloroethene	0.00050	< 0.00050	
108-90-7	Chlorobenzene	0.00050	< 0.00050	
108-88-3	Toluene	0.00050	< 0.00050	
100-41-4	Ethylbenzene	0.00050	< 0.00050	
100-42-5	Styrene	0.00050	< 0.00050	
108-86-1	Bromobenzene	0.00050	< 0.00050	
75-27-4	Bromodichloromethane	0.00050	< 0.00050	
75-25-2	Bromoform	0.00050	< 0.00050	
74-83-9	Bromomethane	0.00050	< 0.00050	
124-48-1	Chlorodibromomethane	0.00050	< 0.00050	
75-00-3	Chloroethane	0.00050	< 0.00050	
67-66-3	Chloroform	0.00050	< 0.00050	
74-87-3	Chloromethane	0.00050	< 0.00050	
95-49-8	2-Chlorotoluene	0.00050	< 0.00050	
106-43-4	4-Chlorotoluene	0.00050	< 0.00050	
74-95-3	Dibromomethane	0.00050	< 0.00050	
541-73-1	1,3-Dichlorobenzene	0.00050	< 0.00050	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
TRIP BLANK

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :	NSH-022	Date Sampled :	5/4/2015 11:00 AM
Location :	Excelsior	Sampled By :	Chad Price
Lab Sample ID :	**L763326-04**	Date Received :	5/6/2015

524.2

Analytic Batch: WG787309 | Analysis Date: 5/7/2015 | Analysis Time: 4:52 PM
Instrument: VOCMS19 | Analyst: 74 | Preparation Date: 5/7/2015 10:45
Method: 524.2 | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
75-34-3	1,1-Dichloroethane	0.00050	< 0.00050	
142-28-9	1,3-Dichloropropane	0.00050	< 0.00050	
594-20-7	2,2-Dichloropropane	0.00050	< 0.00050	
563-58-6	1,1-Dichloropropene	0.00050	< 0.00050	
542-75-6	1,3-Dichloropropene	0.00050	< 0.00050	
630-20-6	1,1,1,2-Tetrachloroethane	0.00050	< 0.00050	
79-34-5	1,1,2,2-Tetrachloroethane	0.00050	< 0.00050	
96-18-4	1,2,3-Trichloropropane	0.00050	< 0.00050	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG787309**
Analysis Date:	5/7/2015 4:23:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03, -04		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.000500	
1,1,1-Trichloroethane	71-55-6	< 0.000500	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.000500	
1,1,2-Trichloroethane	79-00-5	< 0.000500	
1,1-Dichloroethane	75-34-3	< 0.000500	
1,1-Dichloroethene	75-35-4	< 0.000500	
1,1-Dichloropropene	563-58-6	< 0.000500	
1,2,3-Trichloropropane	96-18-4	< 0.000500	
1,2,4-Trichlorobenzene	120-82-1	< 0.000500	
1,2-Dichlorobenzene	95-50-1	< 0.000500	
1,2-Dichloroethane	107-06-2	< 0.000500	
1,2-Dichloropropane	78-87-5	< 0.000500	
1,3-Dichlorobenzene	541-73-1	< 0.000500	
1,3-Dichloropropane	142-28-9	< 0.000500	
1,3-Dichloropropene	542-75-6	< 0.000500	
1,4-Dichlorobenzene	106-46-7	< 0.000500	
2,2-Dichloropropane	594-20-7	< 0.000500	
2-Chlorotoluene	95-49-8	< 0.000500	
4-Chlorotoluene	106-43-4	< 0.000500	
Benzene	71-43-2	< 0.000500	
Bromobenzene	108-86-1	< 0.000500	
Bromodichloromethane	75-27-4	< 0.000500	
Bromoform	75-25-2	< 0.000500	
Bromomethane	74-83-9	< 0.000500	
Carbon tetrachloride	56-23-5	< 0.000500	
Chlorobenzene	108-90-7	< 0.000500	
Chlorodibromomethane	124-48-1	< 0.000500	
Chloroethane	75-00-3	< 0.000500	
Chloroform	67-66-3	< 0.000500	
Chloromethane	74-87-3	< 0.000500	
cis-1,2-Dichloroethene	156-59-2	< 0.000500	
Dibromomethane	74-95-3	< 0.000500	
Ethylbenzene	100-41-4	< 0.000500	
Methylene chloride	75-09-2	< 0.000500	
Styrene	100-42-5	< 0.000500	
Tetrachloroethene	127-18-4	< 0.000500	
Toluene	108-88-3	< 0.000500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG787309**
Analysis Date:	5/7/2015 4:23:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03, -04		

Method Blank

Analyte	CAS	RDL	Qualifier
trans-1,2-Dichloroethene	156-60-5	< 0.000500	
Trichloroethene	79-01-6	< 0.000500	
Vinyl chloride	75-01-4	< 0.000500	
Xylenes, Total	1330-20-7	< 0.000500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.00100	
1,1,1-Trichloroethane	71-55-6	< 0.00100	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.00100	
1,1,2-Trichloroethane	79-00-5	< 0.00100	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.00100	
1,1-Dichloroethane	75-34-3	< 0.00100	
1,1-Dichloroethene	75-35-4	< 0.00100	
1,1-Dichloropropene	563-58-6	< 0.00100	
1,2,3-Trichlorobenzene	87-61-6	< 0.00100	
1,2,3-Trichloropropane	96-18-4	< 0.00250	
1,2,3-Trimethylbenzene	526-73-8	< 0.00100	
1,2,4-Trichlorobenzene	120-82-1	< 0.00100	
1,2,4-Trimethylbenzene	95-63-6	< 0.00100	
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.00500	
1,2-Dibromoethane	106-93-4	< 0.00100	
1,2-Dichlorobenzene	95-50-1	< 0.00100	
1,2-Dichloroethane	107-06-2	< 0.00100	
1,2-Dichloropropane	78-87-5	< 0.00100	
1,3,5-Trimethylbenzene	108-67-8	< 0.00100	
1,3-Butadiene	106-99-0	< 0.00200	
1,3-Dichlorobenzene	541-73-1	< 0.00100	
1,3-Dichloropropane	142-28-9	< 0.00100	
1,4-Dichlorobenzene	106-46-7	< 0.00100	
2,2-Dichloropropane	594-20-7	< 0.00100	
2-Butanone (MEK)	78-93-3	< 0.0100	
2-Chlorotoluene	95-49-8	< 0.00100	
4-Chlorotoluene	106-43-4	< 0.00100	
4-Ethyltoluene	622-96-8	< 0.00100	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 0.0100	
Acetone	67-64-1	< 0.0500	
Acrolein	107-02-8	< 0.0500	
Acrylonitrile	107-13-1	< 0.0100	
Benzene	71-43-2	< 0.00100	
Bromobenzene	108-86-1	< 0.00100	
Bromodichloromethane	75-27-4	< 0.00100	
Bromoform	75-25-2	< 0.00100	
Bromomethane	74-83-9	< 0.00500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Method Blank

Analyte	CAS	RDL	Qualifier
Carbon disulfide	75-15-0	< 0.00100	
Carbon tetrachloride	56-23-5	< 0.00100	
Chlorobenzene	108-90-7	< 0.00100	
Chlorodibromomethane	124-48-1	< 0.00100	
Chloroethane	75-00-3	< 0.00500	
Chloroform	67-66-3	< 0.00500	
Chloromethane	74-87-3	< 0.00250	
cis-1,2-Dichloroethene	156-59-2	< 0.00100	
cis-1,3-Dichloropropene	10061-01-5	< 0.00100	
Cyclohexane	110-82-7	< 0.00100	
Dibromomethane	74-95-3	< 0.00100	
Dichlorodifluoromethane	75-71-8	< 0.00500	
Dicyclopentadiene	77-73-6	< 0.00100	
Di-isopropyl ether	108-20-3	< 0.00100	
Ethylbenzene	100-41-4	< 0.00100	
Hexachloro-1,3-butadiene	87-68-3	< 0.00100	
Isopropylbenzene	98-82-8	< 0.00100	
Methyl Cyclohexane	108-87-2	< 0.00100	
Methyl tert-butyl ether	1634-04-4	< 0.00100	
Methylene Chloride	75-09-2	< 0.00500	
Naphthalene	91-20-3	< 0.00500	
n-Butylbenzene	104-51-8	< 0.00100	
n-Hexane	110-54-3	< 0.0100	
n-Propylbenzene	103-65-1	< 0.00100	
p-Isopropyltoluene	99-87-6	< 0.00100	
Propene	115-07-1	< 0.00250	
sec-Butylbenzene	135-98-8	< 0.00100	
Styrene	100-42-5	< 0.00100	
tert-Butylbenzene	98-06-6	< 0.00100	
Tetrachloroethene	127-18-4	< 0.00100	
Toluene	108-88-3	< 0.00500	
trans-1,2-Dichloroethene	156-60-5	< 0.00100	
trans-1,3-Dichloropropene	10061-02-6	< 0.00100	
Trichloroethene	79-01-6	< 0.00100	
Trichlorofluoromethane	75-69-4	< 0.00500	
Vinyl chloride	75-01-4	< 0.00100	
Xylenes, Total	1330-20-7	< 0.00300	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788981**
Analysis Date:	5/14/2015 2:32:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.000500	
1,1,1-Trichloroethane	71-55-6	< 0.000500	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.000500	
1,1,2-Trichloroethane	79-00-5	< 0.000500	
1,1-Dichloroethane	75-34-3	< 0.000500	
1,1-Dichloroethene	75-35-4	< 0.000500	
1,1-Dichloropropene	563-58-6	< 0.000500	
1,2,3-Trichloropropane	96-18-4	< 0.000500	
1,2,4-Trichlorobenzene	120-82-1	< 0.000500	
1,2-Dichlorobenzene	95-50-1	< 0.000500	
1,2-Dichloroethane	107-06-2	< 0.000500	
1,2-Dichloropropane	78-87-5	< 0.000500	
1,3-Dichlorobenzene	541-73-1	< 0.000500	
1,3-Dichloropropane	142-28-9	< 0.000500	
1,3-Dichloropropene	542-75-6	< 0.000500	
1,4-Dichlorobenzene	106-46-7	< 0.000500	
2,2-Dichloropropane	594-20-7	< 0.000500	
2-Chlorotoluene	95-49-8	< 0.000500	
4-Chlorotoluene	106-43-4	< 0.000500	
Benzene	71-43-2	< 0.000500	
Bromobenzene	108-86-1	< 0.000500	
Bromodichloromethane	75-27-4	< 0.000500	
Bromoform	75-25-2	< 0.000500	
Bromomethane	74-83-9	< 0.000500	
Carbon tetrachloride	56-23-5	< 0.000500	
Chlorobenzene	108-90-7	< 0.000500	
Chlorodibromomethane	124-48-1	< 0.000500	
Chloroethane	75-00-3	< 0.000500	
Chloroform	67-66-3	< 0.000500	
Chloromethane	74-87-3	< 0.000500	
cis-1,2-Dichloroethene	156-59-2	< 0.000500	
Dibromomethane	74-95-3	< 0.000500	
Ethylbenzene	100-41-4	< 0.000500	
Methylene chloride	75-09-2	< 0.000500	
Styrene	100-42-5	< 0.000500	
Tetrachloroethene	127-18-4	< 0.000500	
Toluene	108-88-3	< 0.000500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788981**
Analysis Date:	5/14/2015 2:32:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03		

Method Blank

Analyte	CAS	RDL	Qualifier
trans-1,2-Dichloroethene	156-60-5	< 0.000500	
Trichloroethene	79-01-6	< 0.000500	
Vinyl chloride	75-01-4	< 0.000500	
Xylenes, Total	1330-20-7	< 0.000500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.00100	
1,1,1-Trichloroethane	71-55-6	< 0.00100	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.00100	
1,1,2-Trichloroethane	79-00-5	< 0.00100	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.00100	
1,1-Dichloroethane	75-34-3	< 0.00100	
1,1-Dichloroethene	75-35-4	< 0.00100	
1,1-Dichloropropene	563-58-6	< 0.00100	
1,2,3-Trichlorobenzene	87-61-6	< 0.00100	
1,2,3-Trichloropropane	96-18-4	< 0.00250	
1,2,3-Trimethylbenzene	526-73-8	< 0.00100	
1,2,4-Trichlorobenzene	120-82-1	< 0.00100	
1,2,4-Trimethylbenzene	95-63-6	< 0.00100	
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.00500	
1,2-Dibromoethane	106-93-4	< 0.00100	
1,2-Dichlorobenzene	95-50-1	< 0.00100	
1,2-Dichloroethane	107-06-2	< 0.00100	
1,2-Dichloropropane	78-87-5	< 0.00100	
1,3,5-Trimethylbenzene	108-67-8	< 0.00100	
1,3-Butadiene	106-99-0	< 0.00200	
1,3-Dichlorobenzene	541-73-1	< 0.00100	
1,3-Dichloropropane	142-28-9	< 0.00100	
1,4-Dichlorobenzene	106-46-7	< 0.00100	
2,2-Dichloropropane	594-20-7	< 0.00100	
2-Butanone (MEK)	78-93-3	< 0.0100	
2-Chlorotoluene	95-49-8	< 0.00100	
4-Chlorotoluene	106-43-4	< 0.00100	
4-Ethyltoluene	622-96-8	< 0.00100	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 0.0100	
Acetone	67-64-1	< 0.0500	
Acrolein	107-02-8	< 0.0500	
Acrylonitrile	107-13-1	< 0.0100	
Benzene	71-43-2	< 0.00100	
Bromobenzene	108-86-1	< 0.00100	
Bromodichloromethane	75-27-4	< 0.00100	
Bromoform	75-25-2	< 0.00100	
Bromomethane	74-83-9	< 0.00500	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Method Blank

Analyte	CAS	RDL	Qualifier
Carbon disulfide	75-15-0	< 0.00100	
Carbon tetrachloride	56-23-5	< 0.00100	
Chlorobenzene	108-90-7	< 0.00100	
Chlorodibromomethane	124-48-1	< 0.00100	
Chloroethane	75-00-3	< 0.00500	
Chloroform	67-66-3	< 0.00500	
Chloromethane	74-87-3	< 0.00250	
cis-1,2-Dichloroethene	156-59-2	< 0.00100	
cis-1,3-Dichloropropene	10061-01-5	< 0.00100	
Cyclohexane	110-82-7	< 0.00100	
Dibromomethane	74-95-3	< 0.00100	
Dichlorodifluoromethane	75-71-8	< 0.00500	
Dicyclopentadiene	77-73-6	< 0.00100	
Di-isopropyl ether	108-20-3	< 0.00100	
Ethylbenzene	100-41-4	< 0.00100	
Hexachloro-1,3-butadiene	87-68-3	< 0.00100	
Isopropylbenzene	98-82-8	< 0.00100	
Methyl Cyclohexane	108-87-2	< 0.00100	
Methyl tert-butyl ether	1634-04-4	< 0.00100	
Methylene Chloride	75-09-2	< 0.00500	
Naphthalene	91-20-3	< 0.00500	
n-Butylbenzene	104-51-8	< 0.00100	
n-Hexane	110-54-3	< 0.0100	
n-Propylbenzene	103-65-1	< 0.00100	
p-Isopropyltoluene	99-87-6	< 0.00100	
Propene	115-07-1	< 0.00250	
sec-Butylbenzene	135-98-8	< 0.00100	
Styrene	100-42-5	< 0.00100	
tert-Butylbenzene	98-06-6	< 0.00100	
Tetrachloroethene	127-18-4	< 0.00100	
Toluene	108-88-3	< 0.00500	
trans-1,2-Dichloroethene	156-60-5	< 0.00100	
trans-1,3-Dichloropropene	10061-02-6	< 0.00100	
Trichloroethene	79-01-6	< 0.00100	
Trichlorofluoromethane	75-69-4	< 0.00500	
Vinyl chloride	75-01-4	< 0.00100	
Xylenes, Total	1330-20-7	< 0.00300	

Parameters in bold text are reported in this SDG

12065 Lebanon Rd
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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0242	96.7	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0244	97.6	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0240	95.9	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0256	102	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0268	107	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0267	107	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0267	107	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0256	102	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0235	94	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0238	95.3	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0249	99.6	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0224	89.5	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0230	91.8	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0248	99	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0249	99.6	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0251	100	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0239	95.5	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0268	107	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0232	92.7	75.6 - 124	
1,3-Butadiene	1	0.025	0.0274	110	44.6 - 147	
1,3-Dichlorobenzene	1	0.025	0.0227	91	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0247	98.9	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0235	94	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0244	97.7	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.1306	105	55 - 149	
2-Chlorotoluene	1	0.025	0.0227	90.7	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0229	91.6	77.5 - 120	
4-Ethyltoluene	1	0.025	0.0230	91.9	76.2 - 129	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1239	99.1	70.5 - 133	
Acetone	1	0.125	0.1344	108	35.6 - 163	
Acrolein	1	0.125	0.1448	116	10 - 190	
Acrylonitrile	1	0.125	0.1371	110	55.2 - 130	
Benzene	1	0.025	0.0261	104	74.8 - 121	
Bromobenzene	1	0.025	0.0240	96.2	77.5 - 116	
Bromodichloromethane	1	0.025	0.0242	96.9	75.1 - 116	
Bromoform	1	0.025	0.0235	94.1	67.5 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Bromomethane	1	0.025	0.0279	111	49.9 - 162	
Carbon disulfide	1	0.025	0.0265	106	64.6 - 140	
Carbon tetrachloride	1	0.025	0.0249	99.7	70.2 - 123	
Chlorobenzene	1	0.025	0.0243	97.4	78.1 - 119	
Chlorodibromomethane	1	0.025	0.0247	98.7	74 - 121	
Chloroethane	1	0.025	0.0245	97.8	61.7 - 135	
Chloroform	1	0.025	0.0253	101	76 - 121	
Chloromethane	1	0.025	0.0253	101	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0262	105	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0253	101	78.2 - 120	
Dibromomethane	1	0.025	0.0248	99	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0216	86.4	54.8 - 135	
Dicyclopentadiene	1	0.025	0.0253	101	72.7 - 132	
Di-isopropyl ether	1	0.025	0.0272	109	65.6 - 132	
Ethylbenzene	1	0.025	0.0245	97.9	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0231	92.5	64.7 - 129	
Isopropylbenzene	1	0.025	0.0239	95.7	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0264	106	71.2 - 126	
Methylene Chloride	1	0.025	0.0274	110	70.3 - 120	
Naphthalene	1	0.025	0.0256	102	68.4 - 128	
n-Butylbenzene	1	0.025	0.0236	94.2	76.2 - 126	
n-Hexane	1	0.025	0.0261	104	66.5 - 130	
n-Propylbenzene	1	0.025	0.0235	94.1	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0230	92.2	74 - 131	
Propene	1	0.025	0.0428	171	19.5 - 180	
sec-Butylbenzene	1	0.025	0.0237	94.7	74.4 - 127	
Styrene	1	0.025	0.0241	96.3	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0242	96.7	75.3 - 126	
Tetrachloroethene	1	0.025	0.0219	87.6	72.6 - 126	
Toluene	1	0.025	0.0247	98.9	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0262	105	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0241	96.3	74.3 - 123	
Trichloroethene	1	0.025	0.0244	97.6	77.7 - 118	
Trichlorofluoromethane	1	0.025	0.0257	103	63.5 - 135	
Vinyl chloride	1	0.025	0.0260	104	65.9 - 128	
Xylenes, Total	1	0.075	0.0724	96.5	78.7 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0241	96.5	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0249	99.7	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0245	97.8	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0251	101	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0275	110	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0274	110	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0270	108	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0261	104	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0245	97.8	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0251	101	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0254	102	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0240	95.8	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0236	94.2	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0250	99.9	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0252	101	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0259	103	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0245	97.9	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0274	110	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0236	94.6	75.6 - 124	
1,3-Butadiene	1	0.025	0.0277	111	44.6 - 147	
1,3-Dichlorobenzene	1	0.025	0.0232	92.7	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0254	102	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0246	98.5	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0247	98.9	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.1374	110	55 - 149	
2-Chlorotoluene	1	0.025	0.0228	91.3	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0236	94.2	77.5 - 120	
4-Ethyltoluene	1	0.025	0.0235	94.1	76.2 - 129	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1288	103	70.5 - 133	
Acetone	1	0.125	0.1393	111	35.6 - 163	
Acrolein	1	0.125	0.1506	121	10 - 190	
Acrylonitrile	1	0.125	0.1445	116	55.2 - 130	
Benzene	1	0.025	0.0265	106	74.8 - 121	
Bromobenzene	1	0.025	0.0242	96.7	77.5 - 116	
Bromodichloromethane	1	0.025	0.0246	98.6	75.1 - 116	
Bromoform	1	0.025	0.0238	95.1	67.5 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Bromomethane	1	0.025	0.0269	108	49.9 - 162	
Carbon disulfide	1	0.025	0.0266	106	64.6 - 140	
Carbon tetrachloride	1	0.025	0.0228	91.2	70.2 - 123	
Chlorobenzene	1	0.025	0.0248	99.3	78.1 - 119	
Chlorodibromomethane	1	0.025	0.0247	98.9	74 - 121	
Chloroethane	1	0.025	0.0242	96.7	61.7 - 135	
Chloroform	1	0.025	0.0255	102	76 - 121	
Chloromethane	1	0.025	0.0248	99.1	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0269	108	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0260	104	78.2 - 120	
Dibromomethane	1	0.025	0.0253	101	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0216	86.5	54.8 - 135	
Dicyclopentadiene	1	0.025	0.0254	102	72.7 - 132	
Di-isopropyl ether	1	0.025	0.0274	110	65.6 - 132	
Ethylbenzene	1	0.025	0.0251	100	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0237	94.6	64.7 - 129	
Isopropylbenzene	1	0.025	0.0244	97.5	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0270	108	71.2 - 126	
Methylene Chloride	1	0.025	0.0272	109	70.3 - 120	
Naphthalene	1	0.025	0.0263	105	68.4 - 128	
n-Butylbenzene	1	0.025	0.0247	98.7	76.2 - 126	
n-Hexane	1	0.025	0.0267	107	66.5 - 130	
n-Propylbenzene	1	0.025	0.0241	96.3	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0234	93.7	74 - 131	
Propene	1	0.025	0.0440	176	19.5 - 180	
sec-Butylbenzene	1	0.025	0.0241	96.2	74.4 - 127	
Styrene	1	0.025	0.0245	97.9	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0244	97.5	75.3 - 126	
Tetrachloroethene	1	0.025	0.0231	92.2	72.6 - 126	
Toluene	1	0.025	0.0256	102	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0265	106	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0246	98.4	74.3 - 123	
Trichloroethene	1	0.025	0.0252	101	77.7 - 118	
Trichlorofluoromethane	1	0.025	0.0259	104	63.5 - 135	
Vinyl chloride	1	0.025	0.0262	105	65.9 - 128	
Xylenes, Total	1	0.075	0.0727	96.9	78.7 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0242	96.7	0.0241	96.5	74.2 - 124		0.19	20	
1,1,1-Trichloroethane	1	0.025	0.0244	97.6	0.0249	99.7	73.2 - 123		2.16	20	
1,1,2,2-Tetrachloroethane	1	0.025	0.0240	95.9	0.0245	97.8	70.7 - 122		1.96	20	
1,1,2-Trichloroethane	1	0.025	0.0256	102	0.0251	101	77.7 - 118		1.85	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0268	107	0.0275	110	67.2 - 143		2.37	20	
1,1-Dichloroethane	1	0.025	0.0267	107	0.0274	110	70.7 - 126		2.86	20	
1,1-Dichloroethene	1	0.025	0.0267	107	0.0270	108	67.8 - 129		1.21	20	
1,1-Dichloropropene	1	0.025	0.0256	102	0.0261	104	73.1 - 125		2.01	20	
1,2,3-Trichlorobenzene	1	0.025	0.0235	94	0.0245	97.8	64.9 - 135		3.98	20	
1,2,3-Trichloropropane	1	0.025	0.0238	95.3	0.0251	101	71.8 - 121		5.34	20	
1,2,3-Trimethylbenzene	1	0.025	0.0249	99.6	0.0254	102	72.3 - 116		1.97	20	
1,2,4-Trichlorobenzene	1	0.025	0.0224	89.5	0.0240	95.8	69.7 - 136		6.78	20	
1,2,4-Trimethylbenzene	1	0.025	0.0230	91.8	0.0236	94.2	75 - 123		2.62	20	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0248	99	0.0250	99.9	65.4 - 128		0.85	20	
1,2-Dibromoethane	1	0.025	0.0249	99.6	0.0252	101	76.6 - 121		1.04	20	
1,2-Dichlorobenzene	1	0.025	0.0251	100	0.0259	103	78.4 - 117		2.96	20	
1,2-Dichloroethane	1	0.025	0.0239	95.5	0.0245	97.9	68.8 - 124		2.44	20	
1,2-Dichloropropane	1	0.025	0.0268	107	0.0274	110	76.5 - 119		2.15	20	
1,3,5-Trimethylbenzene	1	0.025	0.0232	92.7	0.0236	94.6	75.6 - 124		1.99	20	
1,3-Butadiene	1	0.025	0.0274	110	0.0277	111	44.6 - 147		1.13	20	
1,3-Dichlorobenzene	1	0.025	0.0227	91	0.0232	92.7	70.8 - 128		1.95	20	
1,3-Dichloropropane	1	0.025	0.0247	98.9	0.0254	102	77.4 - 117		2.6	20	
1,4-Dichlorobenzene	1	0.025	0.0235	94	0.0246	98.5	78.8 - 115		4.74	20	
2,2-Dichloropropane	1	0.025	0.0244	97.7	0.0247	98.9	62.4 - 133		1.2	20	
2-Butanone (MEK)	1	0.125	0.1306	105	0.1374	110	55 - 149		5.06	20	
2-Chlorotoluene	1	0.025	0.0227	90.7	0.0228	91.3	74.7 - 122		0.61	20	
4-Chlorotoluene	1	0.025	0.0229	91.6	0.0236	94.2	77.5 - 120		2.86	20	
4-Ethyltoluene	1	0.025	0.0230	91.9	0.0235	94.1	76.2 - 129		2.43	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1239	99.1	0.1288	103	70.5 - 133		3.9	20	
Acetone	1	0.125	0.1344	108	0.1393	111	35.6 - 163		3.59	23.9	
Acrolein	1	0.125	0.1448	116	0.1506	121	10 - 190		3.99	28.1	
Acrylonitrile	1	0.125	0.1371	110	0.1445	116	55.2 - 130		5.27	20	
Benzene	1	0.025	0.0261	104	0.0265	106	74.8 - 121		1.73	20	
Bromobenzene	1	0.025	0.0240	96.2	0.0242	96.7	77.5 - 116		0.54	20	
Bromodichloromethane	1	0.025	0.0242	96.9	0.0246	98.6	75.1 - 116		1.68	20	
Bromoform	1	0.025	0.0235	94.1	0.0238	95.1	67.5 - 130		0.99	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Bromomethane	1	0.025	0.0279	111	0.0269	108	49.9 - 162		3.38	20	
Carbon disulfide	1	0.025	0.0265	106	0.0266	106	64.6 - 140		0.44	20	
Carbon tetrachloride	1	0.025	0.0249	99.7	0.0228	91.2	70.2 - 123		8.9	20	
Chlorobenzene	1	0.025	0.0243	97.4	0.0248	99.3	78.1 - 119		1.98	20	
Chlorodibromomethane	1	0.025	0.0247	98.7	0.0247	98.9	74 - 121		0.2	20	
Chloroethane	1	0.025	0.0245	97.8	0.0242	96.7	61.7 - 135		1.12	20	
Chloroform	1	0.025	0.0253	101	0.0255	102	76 - 121		0.76	20	
Chloromethane	1	0.025	0.0253	101	0.0248	99.1	61.5 - 129		2.04	20	
cis-1,2-Dichloroethene	1	0.025	0.0262	105	0.0269	108	76 - 119		2.58	20	
cis-1,3-Dichloropropene	1	0.025	0.0253	101	0.0260	104	78.2 - 120		2.97	20	
Dibromomethane	1	0.025	0.0248	99	0.0253	101	79.5 - 118		2.21	20	
Dichlorodifluoromethane	1	0.025	0.0216	86.4	0.0216	86.5	54.8 - 135		0.09	20	
Dicyclopentadiene	1	0.025	0.0253	101	0.0254	102	72.7 - 132		0.5	20	
Di-isopropyl ether	1	0.025	0.0272	109	0.0274	110	65.6 - 132		0.97	20	
Ethylbenzene	1	0.025	0.0245	97.9	0.0251	100	78.8 - 122		2.35	20	
Hexachloro-1,3-butadiene	1	0.025	0.0231	92.5	0.0237	94.6	64.7 - 129		2.3	20	
Isopropylbenzene	1	0.025	0.0239	95.7	0.0244	97.5	78.6 - 132		1.85	20	
Methyl tert-butyl ether	1	0.025	0.0264	106	0.0270	108	71.2 - 126		2.29	20	
Methylene Chloride	1	0.025	0.0274	110	0.0272	109	70.3 - 120		0.73	20	
Naphthalene	1	0.025	0.0256	102	0.0263	105	68.4 - 128		2.58	20	
n-Butylbenzene	1	0.025	0.0236	94.2	0.0247	98.7	76.2 - 126		4.62	20	
n-Hexane	1	0.025	0.0261	104	0.0267	107	66.5 - 130		2.44	20	
n-Propylbenzene	1	0.025	0.0235	94.1	0.0241	96.3	78.2 - 122		2.29	20	
p-Isopropyltoluene	1	0.025	0.0230	92.2	0.0234	93.7	74 - 131		1.62	20	
Propene	1	0.025	0.0428	171	0.0440	176	19.5 - 180		2.79	20	
sec-Butylbenzene	1	0.025	0.0237	94.7	0.0241	96.2	74.4 - 127		1.58	20	
Styrene	1	0.025	0.0241	96.3	0.0245	97.9	80.4 - 126		1.65	20	
tert-Butylbenzene	1	0.025	0.0242	96.7	0.0244	97.5	75.3 - 126		0.87	20	
Tetrachloroethene	1	0.025	0.0219	87.6	0.0231	92.2	72.6 - 126		5.12	20	
Toluene	1	0.025	0.0247	98.9	0.0256	102	79.7 - 116		3.41	20	
trans-1,2-Dichloroethene	1	0.025	0.0262	105	0.0265	106	72.6 - 121		1.21	20	
trans-1,3-Dichloropropene	1	0.025	0.0241	96.3	0.0246	98.4	74.3 - 123		2.07	20	
Trichloroethene	1	0.025	0.0244	97.6	0.0252	101	77.7 - 118		3.43	20	
Trichlorofluoromethane	1	0.025	0.0257	103	0.0259	104	63.5 - 135		0.76	20	
Vinyl chloride	1	0.025	0.0260	104	0.0262	105	65.9 - 128		0.71	20	
Xylenes, Total	1	0.075	0.0724	96.5	0.0727	96.9	78.7 - 121		0.47	20	

Parameters in bold text are reported in this SDG

12065 Lebanon Rd
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Est. 1970

Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0252	101	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0232	93	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0260	104	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0243	97.1	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0246	98.2	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0261	104	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0232	92.7	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0246	98.4	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0288	115	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0258	103	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0251	100	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0294	118	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0228	91.3	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0288	115	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0251	100	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0262	105	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0268	107	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0272	109	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0235	94	75.6 - 124	
1,3-Butadiene	1	0.025	0.0266	106	44.6 - 147	
1,3-Dichlorobenzene	1	0.025	0.0237	94.8	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0240	95.9	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0253	101	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0236	94.6	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.2054	164	55 - 149	L1
2-Chlorotoluene	1	0.025	0.0259	104	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0226	90.5	77.5 - 120	
4-Ethyltoluene	1	0.025	0.0229	91.5	76.2 - 129	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1632	131	70.5 - 133	
Acetone	1	0.125	0.2698	216	35.6 - 163	L1
Acrolein	1	0.125	0.1650	132	10 - 190	
Acrylonitrile	1	0.125	0.1489	119	55.2 - 130	
Benzene	1	0.025	0.0243	97	74.8 - 121	
Bromobenzene	1	0.025	0.0235	93.9	77.5 - 116	
Bromodichloromethane	1	0.025	0.0266	106	75.1 - 116	
Bromoform	1	0.025	0.0269	108	67.5 - 130	

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Bromomethane	1	0.025	0.0188	75.3	49.9 - 162	
Carbon disulfide	1	0.025	0.0218	87.2	64.6 - 140	
Carbon tetrachloride	1	0.025	0.0252	101	70.2 - 123	
Chlorobenzene	1	0.025	0.0263	105	78.1 - 119	
Chlorodibromomethane	1	0.025	0.0256	102	74 - 121	
Chloroethane	1	0.025	0.0185	73.8	61.7 - 135	
Chloroform	1	0.025	0.0239	95.6	76 - 121	
Chloromethane	1	0.025	0.0241	96.3	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0253	101	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0267	107	78.2 - 120	
Dibromomethane	1	0.025	0.0262	105	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0215	85.8	54.8 - 135	
Dicyclopentadiene	1	0.025	0.0236	94.3	72.7 - 132	
Di-isopropyl ether	1	0.025	0.0265	106	65.6 - 132	
Ethylbenzene	1	0.025	0.0242	96.8	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0289	115	64.7 - 129	
Isopropylbenzene	1	0.025	0.0231	92.6	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0271	108	71.2 - 126	
Methylene Chloride	1	0.025	0.0242	96.7	70.3 - 120	
Naphthalene	1	0.025	0.0284	114	68.4 - 128	
n-Butylbenzene	1	0.025	0.0256	103	76.2 - 126	
n-Hexane	1	0.025	0.0268	107	66.5 - 130	
n-Propylbenzene	1	0.025	0.0235	93.9	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0238	95.4	74 - 131	
Propene	1	0.025	0.0570	228	19.5 - 180	L1
sec-Butylbenzene	1	0.025	0.0231	92.6	74.4 - 127	
Styrene	1	0.025	0.0232	92.6	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0234	93.5	75.3 - 126	
Tetrachloroethene	1	0.025	0.0250	99.8	72.6 - 126	
Toluene	1	0.025	0.0239	95.7	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0250	99.9	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0257	103	74.3 - 123	
Trichloroethene	1	0.025	0.0252	101	77.7 - 118	
Trichlorofluoromethane	1	0.025	0.0216	86.4	63.5 - 135	
Vinyl chloride	1	0.025	0.0233	93	65.9 - 128	
Xylenes, Total	1	0.075	0.0709	94.6	78.7 - 121	

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0272	109	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0253	101	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0269	108	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0255	102	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0261	105	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0276	111	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0244	97.4	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0257	103	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0294	118	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0270	108	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0263	105	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0297	119	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0250	100	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0295	118	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0275	110	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0270	108	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0279	112	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0278	111	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0259	103	75.6 - 124	
1,3-Butadiene	1	0.025	0.0281	112	44.6 - 147	
1,3-Dichlorobenzene	1	0.025	0.0260	104	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0260	104	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0261	104	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0255	102	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.2015	161	55 - 149	L1
2-Chlorotoluene	1	0.025	0.0282	113	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0241	96.5	77.5 - 120	
4-Ethyltoluene	1	0.025	0.0250	99.9	76.2 - 129	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1641	131	70.5 - 133	
Acetone	1	0.125	0.2633	211	35.6 - 163	L1
Acrolein	1	0.125	0.1688	135	10 - 190	
Acrylonitrile	1	0.125	0.1528	122	55.2 - 130	
Benzene	1	0.025	0.0254	101	74.8 - 121	
Bromobenzene	1	0.025	0.0254	101	77.5 - 116	
Bromodichloromethane	1	0.025	0.0268	107	75.1 - 116	
Bromoform	1	0.025	0.0280	112	67.5 - 130	

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Bromomethane	1	0.025	0.0203	81.2	49.9 - 162	
Carbon disulfide	1	0.025	0.0234	93.6	64.6 - 140	
Carbon tetrachloride	1	0.025	0.0273	109	70.2 - 123	
Chlorobenzene	1	0.025	0.0282	113	78.1 - 119	
Chlorodibromomethane	1	0.025	0.0272	109	74 - 121	
Chloroethane	1	0.025	0.0209	83.8	61.7 - 135	
Chloroform	1	0.025	0.0257	103	76 - 121	
Chloromethane	1	0.025	0.0254	102	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0268	107	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0278	111	78.2 - 120	
Dibromomethane	1	0.025	0.0274	110	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0232	92.7	54.8 - 135	
Dicyclopentadiene	1	0.025	0.0261	105	72.7 - 132	
Di-isopropyl ether	1	0.025	0.0284	114	65.6 - 132	
Ethylbenzene	1	0.025	0.0262	105	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0299	120	64.7 - 129	
Isopropylbenzene	1	0.025	0.0249	99.7	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0271	109	71.2 - 126	
Methylene Chloride	1	0.025	0.0248	99.4	70.3 - 120	
Naphthalene	1	0.025	0.0296	119	68.4 - 128	
n-Butylbenzene	1	0.025	0.0277	111	76.2 - 126	
n-Hexane	1	0.025	0.0277	111	66.5 - 130	
n-Propylbenzene	1	0.025	0.0255	102	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0265	106	74 - 131	
Propene	1	0.025	0.0624	250	19.5 - 180	L1
sec-Butylbenzene	1	0.025	0.0258	103	74.4 - 127	
Styrene	1	0.025	0.0247	98.9	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0252	101	75.3 - 126	
Tetrachloroethene	1	0.025	0.0273	109	72.6 - 126	
Toluene	1	0.025	0.0248	99.3	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0257	103	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0273	109	74.3 - 123	
Trichloroethene	1	0.025	0.0262	105	77.7 - 118	
Trichlorofluoromethane	1	0.025	0.0232	92.7	63.5 - 135	
Vinyl chloride	1	0.025	0.0242	96.6	65.9 - 128	
Xylenes, Total	1	0.075	0.0764	102	78.7 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0252	101	0.0272	109	74.2 - 124		7.68	20	
1,1,1-Trichloroethane	1	0.025	0.0232	93	0.0253	101	73.2 - 123		8.44	20	
1,1,2,2-Tetrachloroethane	1	0.025	0.0260	104	0.0269	108	70.7 - 122		3.42	20	
1,1,2-Trichloroethane	1	0.025	0.0243	97.1	0.0255	102	77.7 - 118		4.91	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0246	98.2	0.0261	105	67.2 - 143		6.27	20	
1,1-Dichloroethane	1	0.025	0.0261	104	0.0276	111	70.7 - 126		5.76	20	
1,1-Dichloroethene	1	0.025	0.0232	92.7	0.0244	97.4	67.8 - 129		4.96	20	
1,1-Dichloropropene	1	0.025	0.0246	98.4	0.0257	103	73.1 - 125		4.4	20	
1,2,3-Trichlorobenzene	1	0.025	0.0288	115	0.0294	118	64.9 - 135		2.1	20	
1,2,3-Trichloropropane	1	0.025	0.0258	103	0.0270	108	71.8 - 121		4.46	20	
1,2,3-Trimethylbenzene	1	0.025	0.0251	100	0.0263	105	72.3 - 116		4.67	20	
1,2,4-Trichlorobenzene	1	0.025	0.0294	118	0.0297	119	69.7 - 136		1.18	20	
1,2,4-Trimethylbenzene	1	0.025	0.0228	91.3	0.0250	100	75 - 123		9.09	20	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0288	115	0.0295	118	65.4 - 128		2.25	20	
1,2-Dibromoethane	1	0.025	0.0251	100	0.0275	110	76.6 - 121		9.09	20	
1,2-Dichlorobenzene	1	0.025	0.0262	105	0.0270	108	78.4 - 117		2.87	20	
1,2-Dichloroethane	1	0.025	0.0268	107	0.0279	112	68.8 - 124		3.87	20	
1,2-Dichloropropane	1	0.025	0.0272	109	0.0278	111	76.5 - 119		2.11	20	
1,3,5-Trimethylbenzene	1	0.025	0.0235	94	0.0259	103	75.6 - 124		9.57	20	
1,3-Butadiene	1	0.025	0.0266	106	0.0281	112	44.6 - 147		5.52	20	
1,3-Dichlorobenzene	1	0.025	0.0237	94.8	0.0260	104	70.8 - 128		9.25	20	
1,3-Dichloropropane	1	0.025	0.0240	95.9	0.0260	104	77.4 - 117		8	20	
1,4-Dichlorobenzene	1	0.025	0.0253	101	0.0261	104	78.8 - 115		3.04	20	
2,2-Dichloropropane	1	0.025	0.0236	94.6	0.0255	102	62.4 - 133		7.66	20	
2-Butanone (MEK)	1	0.125	0.2054	164	0.2015	161	55 - 149	L1	1.95	20	
2-Chlorotoluene	1	0.025	0.0259	104	0.0282	113	74.7 - 122		8.45	20	
4-Chlorotoluene	1	0.025	0.0226	90.5	0.0241	96.5	77.5 - 120		6.41	20	
4-Ethyltoluene	1	0.025	0.0229	91.5	0.0250	99.9	76.2 - 129		8.73	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1632	131	0.1641	131	70.5 - 133		0.53	20	
Acetone	1	0.125	0.2698	216	0.2633	211	35.6 - 163	L1	2.42	23.9	
Acrolein	1	0.125	0.1650	132	0.1688	135	10 - 190		2.27	28.1	
Acrylonitrile	1	0.125	0.1489	119	0.1528	122	55.2 - 130		2.6	20	
Benzene	1	0.025	0.0243	97	0.0254	101	74.8 - 121		4.43	20	
Bromobenzene	1	0.025	0.0235	93.9	0.0254	101	77.5 - 116		7.7	20	
Bromodichloromethane	1	0.025	0.0266	106	0.0268	107	75.1 - 116		0.99	20	
Bromoform	1	0.025	0.0269	108	0.0280	112	67.5 - 130		3.88	20	

Parameters in bold text are reported in this SDG

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Est. 1970

Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Bromomethane	1	0.025	0.0188	75.3	0.0203	81.2	49.9 - 162		7.51	20	
Carbon disulfide	1	0.025	0.0218	87.2	0.0234	93.6	64.6 - 140		7.15	20	
Carbon tetrachloride	1	0.025	0.0252	101	0.0273	109	70.2 - 123		8.22	20	
Chlorobenzene	1	0.025	0.0263	105	0.0282	113	78.1 - 119		6.73	20	
Chlorodibromomethane	1	0.025	0.0256	102	0.0272	109	74 - 121		5.8	20	
Chloroethane	1	0.025	0.0185	73.8	0.0209	83.8	61.7 - 135		12.6	20	
Chloroform	1	0.025	0.0239	95.6	0.0257	103	76 - 121		7.42	20	
Chloromethane	1	0.025	0.0241	96.3	0.0254	102	61.5 - 129		5.5	20	
cis-1,2-Dichloroethene	1	0.025	0.0253	101	0.0268	107	76 - 119		5.84	20	
cis-1,3-Dichloropropene	1	0.025	0.0267	107	0.0278	111	78.2 - 120		3.83	20	
Dibromomethane	1	0.025	0.0262	105	0.0274	110	79.5 - 118		4.47	20	
Dichlorodifluoromethane	1	0.025	0.0215	85.8	0.0232	92.7	54.8 - 135		7.68	20	
Dicyclopentadiene	1	0.025	0.0236	94.3	0.0261	105	72.7 - 132		10.2	20	
Di-isopropyl ether	1	0.025	0.0265	106	0.0284	114	65.6 - 132		6.86	20	
Ethylbenzene	1	0.025	0.0242	96.8	0.0262	105	78.8 - 122		7.88	20	
Hexachloro-1,3-butadiene	1	0.025	0.0289	115	0.0299	120	64.7 - 129		3.67	20	
Isopropylbenzene	1	0.025	0.0231	92.6	0.0249	99.7	78.6 - 132		7.42	20	
Methyl tert-butyl ether	1	0.025	0.0271	108	0.0271	109	71.2 - 126		0.15	20	
Methylene Chloride	1	0.025	0.0242	96.7	0.0248	99.4	70.3 - 120		2.71	20	
Naphthalene	1	0.025	0.0284	114	0.0296	119	68.4 - 128		4.25	20	
n-Butylbenzene	1	0.025	0.0256	103	0.0277	111	76.2 - 126		7.79	20	
n-Hexane	1	0.025	0.0268	107	0.0277	111	66.5 - 130		3.36	20	
n-Propylbenzene	1	0.025	0.0235	93.9	0.0255	102	78.2 - 122		8.13	20	
p-Isopropyltoluene	1	0.025	0.0238	95.4	0.0265	106	74 - 131		10.6	20	
Propene	1	0.025	0.0570	228	0.0624	250	19.5 - 180	L1	9.07	20	
sec-Butylbenzene	1	0.025	0.0231	92.6	0.0258	103	74.4 - 127		11	20	
Styrene	1	0.025	0.0232	92.6	0.0247	98.9	80.4 - 126		6.59	20	
tert-Butylbenzene	1	0.025	0.0234	93.5	0.0252	101	75.3 - 126		7.71	20	
Tetrachloroethene	1	0.025	0.0250	99.8	0.0273	109	72.6 - 126		8.97	20	
Toluene	1	0.025	0.0239	95.7	0.0248	99.3	79.7 - 116		3.65	20	
trans-1,2-Dichloroethene	1	0.025	0.0250	99.9	0.0257	103	72.6 - 121		2.7	20	
trans-1,3-Dichloropropene	1	0.025	0.0257	103	0.0273	109	74.3 - 123		5.96	20	
Trichloroethene	1	0.025	0.0252	101	0.0262	105	77.7 - 118		3.95	20	
Trichlorofluoromethane	1	0.025	0.0216	86.4	0.0232	92.7	63.5 - 135		6.98	20	
Vinyl chloride	1	0.025	0.0233	93	0.0242	96.6	65.9 - 128		3.8	20	
Xylenes, Total	1	0.075	0.0709	94.6	0.0764	102	78.7 - 121		7.41	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Matrix Spike / Matrix Spike Duplicate

L763681-02

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	<0.001	0.0222	88.6	0.0224	89.5	64 - 128		0.99	20	
1,1,1-Trichloroethane	1	0.025	<0.001	0.0231	92.2	0.0236	94.6	58.7 - 134		2.53	20	
1,1,2,2-Tetrachloroethane	1	0.025	<0.001	0.0238	95.3	0.0241	96.5	56 - 132		1.26	22.2	
1,1,2-Trichloroethane	1	0.025	<0.001	0.0233	93.4	0.0241	96.2	66.3 - 125		3.03	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	<0.001	0.0255	102	0.0258	103	54.8 - 154		1.03	22.5	
1,1-Dichloroethane	1	0.025	<0.001	0.0256	102	0.0258	103	58.5 - 132		0.81	20	
1,1-Dichloroethene	1	0.025	<0.001	0.0253	101	0.0255	102	51.1 - 140		0.77	20.2	
1,1-Dichloropropene	1	0.025	<0.001	0.0248	99.3	0.0250	99.9	57.3 - 136		0.6	20	
1,2,3-Trichlorobenzene	1	0.025	<0.001	0.0241	96.4	0.0248	99.1	59.1 - 138		2.77	23.7	
1,2,3-Trichloropropane	1	0.025	<0.0025	0.0224	89.4	0.0226	90.4	61.4 - 128		1.1	22.4	
1,2,3-Trimethylbenzene	1	0.025	<0.001	0.0239	95.5	0.0242	96.6	61.3 - 122		1.19	20	
1,2,4-Trichlorobenzene	1	0.025	<0.001	0.0246	98.6	0.0254	102	63.6 - 143		3.12	21.9	
1,2,4-Trimethylbenzene	1	0.025	<0.001	0.0226	90.3	0.0228	91.2	57.4 - 137		0.97	20	
1,2-Dibromo-3-Chloropropane	1	0.025	<0.005	0.0244	97.4	0.0241	96.6	57.3 - 136		0.92	27	
1,2-Dibromoethane	1	0.025	<0.001	0.0231	92.5	0.0236	94.3	67.1 - 125		1.96	20	
1,2-Dichlorobenzene	1	0.025	<0.001	0.0245	97.9	0.0244	97.4	68.2 - 123		0.56	20	
1,2-Dichloroethane	1	0.025	<0.001	0.0226	90.2	0.0229	91.7	60 - 126		1.69	20	
1,2-Dichloropropane	1	0.025	<0.001	0.0255	102	0.0254	102	64.2 - 123		0.3	20	
1,3,5-Trimethylbenzene	1	0.025	<0.001	0.0228	91.4	0.0228	91.1	63.6 - 132		0.22	20.5	
1,3-Butadiene	1	0.025	<0.002	0.0247	98.8	0.0246	98.2	30.5 - 151		0.57	20	
1,3-Dichlorobenzene	1	0.025	<0.001	0.0227	90.7	0.0228	91.1	63.1 - 131		0.44	20	
1,3-Dichloropropane	1	0.025	<0.001	0.0233	93.1	0.0232	92.9	67.9 - 121		0.22	20	
1,4-Dichlorobenzene	1	0.025	<0.001	0.0248	99.1	0.0252	101	68.6 - 123		1.85	20	
2,2-Dichloropropane	1	0.025	<0.001	0.0234	93.7	0.0237	94.7	50.5 - 144		1.12	21.9	
2-Butanone (MEK)	1	0.125	<0.01	0.0988	78.6	0.0992	78.8	22.4 - 138		0.34	27	
2-Chlorotoluene	1	0.025	<0.001	0.0223	89.2	0.0222	88.6	63.6 - 128		0.63	20	
4-Chlorotoluene	1	0.025	<0.001	0.0230	91.8	0.0231	92.3	65.7 - 127		0.56	20	
4-Ethyltoluene	1	0.025	<0.001	0.0231	92.5	0.0233	93.1	64.5 - 138		0.6	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	<0.01	0.1194	95.6	0.1203	96.2	60.8 - 140		0.71	25.1	
Acetone	1	0.125	<0.05	0.0697	53.1	0.0691	52.7	10 - 130		0.8	27.9	
Acrolein	1	0.125	<0.05	0.1290	103	0.1288	103	10 - 200		0.18	27.7	
Acrylonitrile	1	0.125	<0.01	0.1335	107	0.1344	108	49.4 - 133		0.69	25.3	
Benzene	1	0.025	<0.001	0.0263	105	0.0265	106	54.3 - 133		1.01	20	
Bromobenzene	1	0.025	<0.001	0.0229	91.4	0.0233	93.4	63.9 - 124		2.08	20	
Bromodichloromethane	1	0.025	<0.001	0.0225	89.9	0.0228	91.4	63.9 - 121		1.61	20	
Bromoform	1	0.025	<0.001	0.0219	87.7	0.0224	89.8	59.5 - 134		2.26	20.5	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Matrix Spike / Matrix Spike Duplicate

L763681-02

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Bromomethane	1	0.025	<0.005	0.0244	97.7	0.0254	102	41.7 - 155		3.85	21.9	
Carbon disulfide	1	0.025	<0.001	0.0240	96.1	0.0239	95.8	43.3 - 149		0.34	20.3	
Carbon tetrachloride	1	0.025	<0.001	0.0242	96.9	0.0215	86.1	55.7 - 134		11.8	20	
Chlorobenzene	1	0.025	<0.001	0.0263	105	0.0262	105	67 - 125		0.17	20	
Chlorodibromomethane	1	0.025	<0.001	0.0228	91.3	0.0232	92.7	64.3 - 125		1.5	20.8	
Chloroethane	1	0.025	<0.005	0.0219	87.6	0.0227	90.7	51.5 - 136		3.51	40	
Chloroform	1	0.025	<0.005	0.0237	95	0.0239	95.5	63 - 129		0.57	20	
Chloromethane	1	0.025	<0.0025	0.0225	89.9	0.0221	88.5	42.4 - 135		1.56	20	
cis-1,2-Dichloroethene	1	0.025	<0.001	0.0249	99.6	0.0256	102	59.2 - 129		2.77	20	
cis-1,3-Dichloropropene	1	0.025	<0.001	0.0242	96.7	0.0243	97.4	66.4 - 125		0.68	20	
Dibromomethane	1	0.025	<0.001	0.0230	91.9	0.0239	95.6	68.2 - 124		3.97	20	
Dichlorodifluoromethane	1	0.025	<0.005	0.0195	78.1	0.0193	77.3	40.6 - 144		1.01	20.2	
Dicyclopentadiene	1	0.025	<0.001	0.0240	95.9	0.0240	96.2	61.8 - 139		0.26	20.2	
Di-isopropyl ether	1	0.025	<0.001	0.0254	102	0.0260	104	56.9 - 136		2.4	20	
Ethylbenzene	1	0.025	<0.001	0.0232	92.8	0.0234	93.7	61.4 - 133		0.92	20	
Hexachloro-1,3-butadiene	1	0.025	<0.001	0.0234	93.8	0.0239	95.7	55.1 - 136		2	23.6	
Isopropylbenzene	1	0.025	<0.001	0.0230	92.2	0.0234	93.7	66.8 - 141		1.64	20	
Methyl tert-butyl ether	1	0.025	<0.001	0.0254	102	0.0259	104	57.7 - 134		1.98	20	
Methylene Chloride	1	0.025	<0.005	0.0260	104	0.0264	106	58.1 - 122		1.45	20	
Naphthalene	1	0.025	<0.005	0.0253	101	0.0260	104	58 - 135		2.44	25.5	
n-Butylbenzene	1	0.025	<0.001	0.0253	101	0.0253	101	62.7 - 140		0.36	20.3	
n-Hexane	1	0.025	<0.01	0.0248	99.2	0.0253	101	45 - 144		1.8	20	
n-Propylbenzene	1	0.025	<0.001	0.0235	94.1	0.0236	94.4	65.9 - 131		0.38	20	
p-Isopropyltoluene	1	0.025	<0.001	0.0229	91.7	0.0232	92.8	63.2 - 139		1.13	20.4	
Propene	1	0.025	<0.0025	0.0430	172	0.0410	164	10 - 176		4.77	26.6	
sec-Butylbenzene	1	0.025	<0.001	0.0231	92.2	0.0234	93.4	62.2 - 136		1.27	20.3	
Styrene	1	0.025	<0.001	0.0231	92.3	0.0231	92.4	66.8 - 133		0.12	20	
tert-Butylbenzene	1	0.025	<0.001	0.0229	91.8	0.0234	93.4	63.3 - 134		1.8	21	
Tetrachloroethene	1	0.025	<0.001	0.0212	84.7	0.0215	85.9	53 - 139		1.36	20	
Toluene	1	0.025	<0.005	0.0237	91.2	0.0240	92.1	61.4 - 130		0.99	20	
trans-1,2-Dichloroethene	1	0.025	<0.001	0.0246	98.4	0.0249	99.5	56.5 - 129		1.13	20	
trans-1,3-Dichloropropene	1	0.025	<0.001	0.0232	92.9	0.0228	91.3	64.1 - 128		1.68	20	
Trichloroethene	1	0.025	<0.001	0.0230	91.8	0.0228	91.3	44.1 - 149		0.58	20	
Trichlorofluoromethane	1	0.025	<0.005	0.0240	95.9	0.0244	97.6	49.6 - 145		1.84	21.2	
Vinyl chloride	1	0.025	<0.001	0.0237	94.8	0.0240	95.8	47.8 - 137		1.04	20	
Xylenes, Total	1	0.075	<0.003	0.0692	92.3	0.0697	92.9	63.3 - 131		0.66	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG787309**
Analysis Date:	5/7/2015 4:23:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03, -04		

Internal Standard Response and Retention Time Summary

File ID: 0506_22
Analyzed: 05/07/15 100000

	Response	RT
12 Hr. Std	338189	4.43
Upper Limit	496000	4.93
Lower Limit	165000	3.93

Sample ID	Response	RT
L763326-03	339396	4.43
L763326-04	347138	4.43
BLANK WG787309	341952	4.43

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Internal Standard Response and Retention Time Summary

File ID: 0514_02
Analyzed: 05/14/15 023600

	IS1		DFB		IS3		IS4	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	582947	4.37	1022740	4.70	153834	5.87	432475	8.26
Upper Limit	1170000	4.87	2050000	5.20	308000	6.37	865000	8.76
Lower Limit	291000	3.87	511000	4.20	76900	5.37	216000	7.76
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L763326-01	608054	4.37	1039321	4.70	151265	5.87	457852	8.26
L763326-02	620444	4.37	1055611	4.70	156882	5.87	468693	8.26
MSD WG788839	566750	4.37	1013421	4.70	154477	5.87	431231	8.26
MS WG788839	574517	4.37	1020308	4.70	154731	5.87	433384	8.26
LCSD WG788839	567668	4.37	999014	4.70	151511	5.87	422512	8.26
LCS WG788839	571493	4.37	1014631	4.70	151734	5.87	426263	8.26
BLANK WG788839	637272	4.37	1091592	4.70	162848	5.87	483501	8.26

Legend:

IS1 -- PENTAFLUOROBENZENE
DFB -- 1,4-DIFLUOROBENZENE
IS3 -- 2-BROMO-1-CHLOROPROPANE
IS4 -- 1,4-DICHLOROBENZENE-D4

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788981**
Analysis Date:	5/14/2015 2:32:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03		

Internal Standard Response and Retention Time Summary

File ID: 0514_05
Analyzed: 05/14/15 102100

	Response	RT
12 Hr. Std	336587	4.43
Upper Limit	505000	4.93
Lower Limit	168000	3.93
Sample ID	**Response**	**RT**
L763326-03 10X	333142	4.43
BLANK WG788981	330931	4.43

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG787309**
Analysis Date:	5/7/2015 4:23:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03, -04		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	BFB ppm	BFB % Rec
BLANK WG787309	VOCMS19	0506_25	0.00390	97.6

BFB --4-BROMOFLUOROBENZENE True Value: 0.004 ppm Limits: 70 - 130

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788839**
Analysis Date:	5/14/2015 1:30:00 PM	Analyst:	621
Instrument ID:	VOCMS30		
Sample Numbers:	L763326-01, -02		

Surrogate Summary

			BFB		DFM		TD8		TFT	
Laboratory Sample ID	Instrument	File ID	ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L763326-01	VOCMS30	0514_27	0.0419	105	0.0411	103	0.0407	102		
L763326-02	VOCMS30	0514_28	0.0409	102	0.0414	104	0.0414	103		
LCS WG788839	VOCMS30	0514_03	0.0408	102	0.0417	104	0.0420	105	0.0401	100
LCSD WG788839	VOCMS30	0514_04	0.0401	100	0.0414	103	0.0424	106	0.0403	101
MS WG788839	VOCMS30	0514_06	0.0412	103	0.0416	104	0.0424	106	0.0403	101
MSD WG788839	VOCMS30	0514_07	0.0410	102	0.0417	104	0.0422	105	0.0402	101
BLANK WG788839	VOCMS30	0514_09	0.0411	103	0.0415	104	0.0408	102	0.0399	99.8

BFB --4-BROMOFLUOROBENZENE	True Value: 0.04 ppm	Limits: 71 - 126
DFM --DIBROMOFLUOROMETHANE	True Value: 0.04 ppm	Limits: 78.3 - 121
TD8 --TOLUENE-D8	True Value: 0.04 ppm	Limits: 88.50 - 111
TFT --A,A,A-TRIFLUOROTOLUENE	True Value: 0.04 ppm	Limits: 85 - 114

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG788981**
Analysis Date:	5/14/2015 2:32:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L763326-03		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	BFB ppm	BFB % Rec
BLANK WG788981	VOCMS19	0514_07	0.00381	95.3

BFB --4-BROMOFLUOROBENZENE True Value: 0.004 ppm Limits: 70 - 130

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Quality Control Summary
SDG: L763326
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/4/2015	**Analytic Batch:**	**WG789359**
Analysis Date:	5/15/2015 3:57:00 PM	Analyst:	621
Instrument ID:	VOCMS2		
Sample Numbers:	L763326-01		

Surrogate Summary

			BFB		DFM		TD8		TFT	
Laboratory Sample ID	Instrument	File ID	ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L763326-01	VOCMS2	0514_63	0.0362	90.4	0.0421	105	0.0419	105		
BLANK WG789359	VOCMS2	0514_37A	0.0349	87.4	0.0411	103	0.0414	104	0.0434	109
LCS WG789359	VOCMS2	0514_54A	0.0379	94.8	0.0417	104	0.0407	102	0.0417	104
LCSD WG789359	VOCMS2	0514_55A	0.0374	93.5	0.0411	103	0.0404	101	0.0424	106

BFB --4-BROMOFLUOROBENZENE	True Value: 0.04 ppm	Limits: 71 - 126
DFM --DIBROMOFLUOROMETHANE	True Value: 0.04 ppm	Limits: 78.3 - 121
TD8 --TOLUENE-D8	True Value: 0.04 ppm	Limits: 88.50 - 111
TFT --A,A,A-TRIFLUOROTOLUENE	True Value: 0.04 ppm	Limits: 85 - 114

Company Name/Address:
Haley & Aldrich
One Arizona Center
Suite 545
Phoenix, AZ 85004

Billing Information:
Rebecca Sawyer
Gunnison Copper Project
2999 N. 44th St.
Suite 300. Phoenix, AZ, 85018
520-368-1772

Report to: Lauren Candreva
Adam Kneeling

Email To:
akneeling@haleyaldrich.com

Project Description: Excelsior

City/State Collected: AZ

Phone: 602-760-2450
Fax: Lauren Candreva

Client Project #: 38681

Lab Project #

Collected by (print): Chad Price

Site/Facility ID #: NSH-022

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No ___Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOC (8260B) HCl preserved ESC bottles	ESC trip blank	VOC (8260B) Ascorbic Acid preserved SVL bottles	SVL trip blank dated 2-26-15	Rem./Contaminant	Sample # (lab only)
NSH-022-050415		GW		5-4-15	11:00	2	✓					01
~~NSH-022-050415~~ Trip Blank				5-4-15	11:00	1		✓				02
NSH-022-050415		GW		5-4-15	11:00	3			✓			
Trip Blank				5-4-15	11:00	1				✓		

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other GW

Remarks:

pH 8.7 Temp 72.2°F 630937427215
Flow <3gpm Other _____

Chain of Custody Page ___ of ___

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L# L763326

D012

Acctnum: HALALDPAZ
Template:
Prelogin:
TSR:
Cooler:
Shipped Via:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	5/5/15	905	
Relinquished by: (Signature)	5/5/15	1830	FedEx
Relinquished by: (Signature)			Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 25 °C Bottles Received: 7
Date: 5/6/15 Time: 0900

Hold #
Condition: (lab use only) M
COC Seal Intact: ___Y ___N ___NA
pH Checked: NCF:

ESC Lab Sciences
Non-Conformance Form

Login #:L763326	Client: HALALDPAZ	Date:5/6/15	Evaluated by:Matt S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments:For the second set of groundwaters are preserved with ASCORBIC ACID. Please clarify

Client informed by:		Call		Email		Voice Mail		Date: 05/06/15	Time: 16:00
TSR Initials: DR	Client Contact:								

Login Instructions:

Run as 524

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Quality Control Summary
SDG: L768095

For: Haley & Aldrich - AZ
Excelsior

L768095

Lab SampleID.	Client ID
L768095-01	NSH-024-052714
L768095-02	TRIP BLANK

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Quality Control Summary
SDG: L768095

For: Haley & Aldrich - AZ
Project: Excelsior
June 03, 2015

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Volatile Organic Compounds by Method 524.2

Laboratory Control Sample

Samples L768095-01 and -02 were analyst in WG792884.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. McLain
ESC Representative
ESC Lab Sciences

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Lauren Candreva
Haley & Aldrich - AZ
400 E. Van Buren Street, Ste 545
Phoenix, AZ 85004

Report Summary

Wednesday June 03, 2015

Report Number: L768095
Samples Received: 05/30/15
Client Project: 38681

Description: Excelsior

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards
Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Quality Control Summary
SDG: L768095

For: Haley & Aldrich - AZ
Excelsior

L768095

Lab SampleID.	Client ID
L768095-01	NSH-024-052714
L768095-02	TRIP BLANK

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SAMPLE NUMBER
NSH-024-052714

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :		Date Sampled :	5/27/2015 9:30 AM
Location :	Excelsior	Sampled By :	K. Ford
Lab Sample ID :	**L768095-01**	Date Received :	5/30/2015

Analytic Batch: WG792884 Analysis Date: 6/2/2015 Analysis Time: 12:59
Instrument: VOCMS19 Analyst: 74 Preparation Date: 6/2/2015 10:01
Method: Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
71-43-2	Benzene	0.00050	< 0.00050	
56-23-5	Carbon tetrachloride	0.00050	< 0.00050	
106-46-7	1,4-Dichlorobenzene	0.00050	< 0.00050	
107-06-2	1,2-Dichloroethane	0.00050	< 0.00050	
75-35-4	1,1-Dichloroethene	0.00050	< 0.00050	
71-55-6	1,1,1-Trichloroethane	0.00050	< 0.00050	
79-01-6	Trichloroethene	0.00050	< 0.00050	
75-01-4	Vinyl chloride	0.00050	< 0.00050	
120-82-1	1,2,4-Trichlorobenzene	0.00050	< 0.00050	
156-59-2	cis-1,2-Dichloroethene	0.00050	< 0.00050	
1330-20-7	Xylenes, Total	0.00050	< 0.00050	
75-09-2	Methylene chloride	0.00050	< 0.00050	
95-50-1	1,2-Dichlorobenzene	0.00050	< 0.00050	
156-60-5	trans-1,2-Dichloroethene	0.00050	< 0.00050	
78-87-5	1,2-Dichloropropane	0.00050	< 0.00050	
79-00-5	1,1,2-Trichloroethane	0.00050	< 0.00050	
127-18-4	Tetrachloroethene	0.00050	< 0.00050	
108-90-7	Chlorobenzene	0.00050	< 0.00050	
108-88-3	Toluene	0.00050	**0.0077**	
100-41-4	Ethylbenzene	0.00050	< 0.00050	
100-42-5	Styrene	0.00050	< 0.00050	
108-86-1	Bromobenzene	0.00050	< 0.00050	
75-27-4	Bromodichloromethane	0.00050	< 0.00050	
75-25-2	Bromoform	0.00050	< 0.00050	
74-83-9	Bromomethane	0.00050	< 0.00050	
124-48-1	Chlorodibromomethane	0.00050	< 0.00050	
75-00-3	Chloroethane	0.00050	< 0.00050	
67-66-3	Chloroform	0.00050	< 0.00050	
74-87-3	Chloromethane	0.00050	< 0.00050	
95-49-8	2-Chlorotoluene	0.00050	< 0.00050	
106-43-4	4-Chlorotoluene	0.00050	< 0.00050	
74-95-3	Dibromomethane	0.00050	< 0.00050	
541-73-1	1,3-Dichlorobenzene	0.00050	< 0.00050	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
NSH-024-052714

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :		Date Sampled :	5/27/2015 9:30 AM
Location :	Excelsior	Sampled By :	K. Ford
Lab Sample ID :	**L768095-01**	Date Received :	5/30/2015

524.2

Analytic Batch: WG792884 | Analysis Date: 6/2/2015 | Analysis Time: 12:59
Instrument: VOCMS19 | Analyst: 74 | Preparation Date: 6/2/2015 10:01
Method: 524.2 | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
75-34-3	1,1-Dichloroethane	0.00050	< 0.00050	
142-28-9	1,3-Dichloropropane	0.00050	< 0.00050	
594-20-7	2,2-Dichloropropane	0.00050	< 0.00050	
563-58-6	1,1-Dichloropropene	0.00050	< 0.00050	
542-75-6	1,3-Dichloropropene	0.00050	< 0.00050	
630-20-6	1,1,1,2-Tetrachloroethane	0.00050	< 0.00050	
79-34-5	1,1,2,2-Tetrachloroethane	0.00050	< 0.00050	
96-18-4	1,2,3-Trichloropropane	0.00050	< 0.00050	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
TRIP BLANK

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :		Date Sampled :	5/27/2015 12:00 AM
Location :	Excelsior	Sampled By :	K. Ford
Lab Sample ID :	**L768095-02**	Date Received :	5/30/2015

Analytic Batch: WG792884 Analysis Date: 6/2/2015 Analysis Time: 11:50
Instrument: VOCMS19 Analyst: 74 Preparation Date: 6/2/2015 10:01
Method: Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
67-64-1	Acetone	0.050	< 0.050	
71-43-2	Benzene	0.00050	< 0.00050	
56-23-5	Carbon tetrachloride	0.00050	< 0.00050	
106-46-7	1,4-Dichlorobenzene	0.00050	< 0.00050	
107-06-2	1,2-Dichloroethane	0.00050	< 0.00050	
75-35-4	1,1-Dichloroethene	0.00050	< 0.00050	
71-55-6	1,1,1-Trichloroethane	0.00050	< 0.00050	
79-01-6	Trichloroethene	0.00050	< 0.00050	
75-01-4	Vinyl chloride	0.00050	< 0.00050	
120-82-1	1,2,4-Trichlorobenzene	0.00050	< 0.00050	
156-59-2	cis-1,2-Dichloroethene	0.00050	< 0.00050	
1330-20-7	Xylenes, Total	0.00050	< 0.00050	
75-09-2	Methylene chloride	0.00050	< 0.00050	
95-50-1	1,2-Dichlorobenzene	0.00050	< 0.00050	
156-60-5	trans-1,2-Dichloroethene	0.00050	< 0.00050	
78-87-5	1,2-Dichloropropane	0.00050	< 0.00050	
79-00-5	1,1,2-Trichloroethane	0.00050	< 0.00050	
127-18-4	Tetrachloroethene	0.00050	< 0.00050	
108-90-7	Chlorobenzene	0.00050	< 0.00050	
108-88-3	Toluene	0.00050	< 0.00050	
100-41-4	Ethylbenzene	0.00050	< 0.00050	
100-42-5	Styrene	0.00050	< 0.00050	
108-86-1	Bromobenzene	0.00050	< 0.00050	
75-27-4	Bromodichloromethane	0.00050	< 0.00050	
75-25-2	Bromoform	0.00050	< 0.00050	
74-83-9	Bromomethane	0.00050	< 0.00050	
124-48-1	Chlorodibromomethane	0.00050	< 0.00050	
75-00-3	Chloroethane	0.00050	< 0.00050	
67-66-3	Chloroform	0.00050	< 0.00050	
74-87-3	Chloromethane	0.00050	< 0.00050	
95-49-8	2-Chlorotoluene	0.00050	< 0.00050	
106-43-4	4-Chlorotoluene	0.00050	< 0.00050	
74-95-3	Dibromomethane	0.00050	< 0.00050	
541-73-1	1,3-Dichlorobenzene	0.00050	< 0.00050	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
TRIP BLANK

Customer :	Haley & Aldrich - AZ	Project :	38681
Source :		Date Sampled :	5/27/2015 12:00 AM
Location :	Excelsior	Sampled By :	K. Ford
Lab Sample ID :	**L768095-02**	Date Received :	5/30/2015

524.2

Analytic Batch: WG792884	Analysis Date: 6/2/2015	Analysis Time: 11:50
Instrument: VOCMS19	Analyst: 74	Preparation Date: 6/2/2015 10:01
Method: 524.2	Dilution: 1	

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
75-34-3	1,1-Dichloroethane	0.00050	< 0.00050	
142-28-9	1,3-Dichloropropane	0.00050	< 0.00050	
594-20-7	2,2-Dichloropropane	0.00050	< 0.00050	
563-58-6	1,1-Dichloropropene	0.00050	< 0.00050	
542-75-6	1,3-Dichloropropene	0.00050	< 0.00050	
630-20-6	1,1,1,2-Tetrachloroethane	0.00050	< 0.00050	
79-34-5	1,1,2,2-Tetrachloroethane	0.00050	< 0.00050	
96-18-4	1,2,3-Trichloropropane	0.00050	< 0.00050	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Quality Control Summary
SDG: L768095
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/27/2015	**Analytic Batch:**	**WG792884**
Analysis Date:	6/2/2015 12:59:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L768095-01, -02		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.000500	
1,1,1-Trichloroethane	71-55-6	< 0.000500	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.000500	
1,1,2-Trichloroethane	79-00-5	< 0.000500	
1,1-Dichloroethane	75-34-3	< 0.000500	
1,1-Dichloroethene	75-35-4	< 0.000500	
1,1-Dichloropropene	563-58-6	< 0.000500	
1,2,3-Trichloropropane	96-18-4	< 0.000500	
1,2,4-Trichlorobenzene	120-82-1	< 0.000500	
1,2-Dichlorobenzene	95-50-1	< 0.000500	
1,2-Dichloroethane	107-06-2	< 0.000500	
1,2-Dichloropropane	78-87-5	< 0.000500	
1,3-Dichlorobenzene	541-73-1	< 0.000500	
1,3-Dichloropropane	142-28-9	< 0.000500	
1,3-Dichloropropene	542-75-6	< 0.000500	
1,4-Dichlorobenzene	106-46-7	< 0.000500	
2,2-Dichloropropane	594-20-7	< 0.000500	
2-Chlorotoluene	95-49-8	< 0.000500	
4-Chlorotoluene	106-43-4	< 0.000500	
Benzene	71-43-2	< 0.000500	
Bromobenzene	108-86-1	< 0.000500	
Bromodichloromethane	75-27-4	< 0.000500	
Bromoform	75-25-2	< 0.000500	
Bromomethane	74-83-9	< 0.000500	
Carbon tetrachloride	56-23-5	< 0.000500	
Chlorobenzene	108-90-7	< 0.000500	
Chlorodibromomethane	124-48-1	< 0.000500	
Chloroethane	75-00-3	< 0.000500	
Chloroform	67-66-3	< 0.000500	
Chloromethane	74-87-3	< 0.000500	
cis-1,2-Dichloroethene	156-59-2	< 0.000500	
Dibromomethane	74-95-3	< 0.000500	
Ethylbenzene	100-41-4	< 0.000500	
Methylene chloride	75-09-2	< 0.000500	
Styrene	100-42-5	< 0.000500	
Tetrachloroethene	127-18-4	< 0.000500	
Toluene	108-88-3	< 0.000500	

Parameters in bold text are reported in this SDG

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L768095
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/27/2015	**Analytic Batch:**	**WG792884**
Analysis Date:	6/2/2015 12:59:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L768095-01, -02		

Method Blank

Analyte	CAS	RDL	Qualifier
trans-1,2-Dichloroethene	156-60-5	< 0.000500	
Trichloroethene	79-01-6	< 0.000500	
Vinyl chloride	75-01-4	< 0.000500	
Xylenes, Total	1330-20-7	< 0.000500	

Parameters in bold text are reported in this SDG

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Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L768095
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/27/2015	**Analytic Batch:**	**WG792884**
Analysis Date:	6/2/2015 12:59:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L768095-01, -02		

Internal Standard Response and Retention Time Summary

File ID: 0602_03
Analyzed: 06/02/15 093400

	Response	RT
12 Hr. Std	335500	4.43
Upper Limit	503000	4.93
Lower Limit	168000	3.93

Sample ID	Response	RT
L768095-02	321967	4.43
L768095-01	321577	4.43
BLANK WG792884	325966	4.43

Parameters in bold text are reported in this SDG

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Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L768095
Haley & Aldrich - AZ

Test:	Volatile Organic Compounds by Method 524.2		
Project No:	38681	Matrix:	Water - mg/L
Project:	Excelsior	EPA ID:	TN00003
Collection Date:	5/27/2015	**Analytic Batch:**	**WG792884**
Analysis Date:	6/2/2015 12:59:00 PM	Analyst:	74
Instrument ID:	VOCMS19		
Sample Numbers:	L768095-01, -02		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	BFB ppm	BFB % Rec
BLANK WG792884	VOCMS19	0602_07	0.00364	91.0

BFB --4-BROMOFLUOROBENZENE True Value: 0.004 ppm Limits: 70 - 130

Company Name/Address

Haley & Aldrich

~~4636 E. University Dr.~~ 400 E. VAN BUREN
~~Suite 145~~ SUITE 545
~~Phoenix, AZ 85034~~ PHOENIX, AZ 85004

Alternate Billing: GUNNISON GARFIELD PROJECT
REBECCA SAWYER
2999 N. 44TH ST
SUITE 330
PHOENIX, AZ
85018
520-368-1772

Report to: LAUREN CANDREVA

E-mail to: lcandreva@haleyaldrich.com

Project Description: EXCELSIOR

City/State Collected:

PHONE: 602-760-2429

FAX:

Client Project No.: 38681

Lab Project #

Collected by: K FORD

Site/Facility ID#

P.O.#

Collected by(signature):

Packed on Ice N___ Y✓

Rush? (Lab MUST be Notified)
_____Next Day.....100%
_____Two Day.....50%
_____Three Day.....25%

Date Results Needed

Email?___No_X__Yes
FAX?____No___Yes

Analysis/Container/Preservative: ~~VOC 40mL vial HCl~~; VOC (524.2) + ACETONE 40mL vial HCl

Chain of Custody
Page 1 of 1

Prepared by:

ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

K201

CoCode (lab use only)
HALALDPAZ
Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	~~VOC 40mL vial HCl~~	VOC (524.2) + ACETONE 40mL vial HCl						Remarks/contaminant	Sample # (lab only)
NSH-024-052714	GRAB	GW	--	5/27/15	0930	3		X							L768095-01
TRIP BLANK						1		X							-02

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH_____ Temp_____

Remarks: 6361 0189 0371

Flow_____ Other_____

Relinquished by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__Other__	Condition (lab use only)
R.C. Gavin for KENDRA FORD	5/28/15	0800	R.C. Gavin		OK
R.C. Gavin	5/28/15	1102	Craig Rasmussen	Temp: 5.8 / Bottles Received: 4	CoC Seals Intact ___Y ___N ___n/a
Craig Rasmussen	5-28-15	1830	[illegible]	Date: 5/30/15 / Time: 1230	pH Checked: NCF:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM		
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM		
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM			
Matrix	Water	**Sample Location**	W5B0488-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	0.59	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.0	70-130
Bromofluorobenzene	EPA 524.3	98.2	70-130
Toluene-d8	EPA 524.3	97.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM		
Matrix	Water	**Sample Location**	W5B0488-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM		
Matrix	Water	**Sample Location**	W5B0488-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM			
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	0.58	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.2	70-130
Bromofluorobenzene	EPA 524.3	96.0	70-130
Toluene-d8	EPA 524.3	98.0	70-130

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5B0488-03			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5B0488-03			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5B0488-03		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-003

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.8	70-130
Bromofluorobenzene	EPA 524.3	94.4	70-130
Toluene-d8	EPA 524.3	94.4	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
Toluene	10.3	ug/L	10	103.0	70-130	3/6/2015	3/6/2015
Tetrachloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
Ethylbenzene	10.4	ug/L	10	104.0	70-130	3/6/2015	3/6/2015
Chlorobenzene	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
Benzene	9.93	ug/L	10	99.3	70-130	3/6/2015	3/6/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150303020-001	Trichloroethene	ND	9.47	ug/L	10	94.7	70-130	3/6/2015	3/6/2015
150303020-001	Toluene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
150303020-001	Tetrachloroethene	ND	8.33	ug/L	10	83.3	70-130	3/6/2015	3/6/2015
150303020-001	Ethylbenzene	ND	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
150303020-001	Chlorobenzene	ND	9.72	ug/L	10	97.2	70-130	3/6/2015	3/6/2015
150303020-001	Benzene	ND	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
150303020-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.32	ug/L	10	93.2	1.6	0-30	3/6/2015	3/6/2015
Toluene	10.1	ug/L	10	101.0	3.9	0-30	3/6/2015	3/6/2015
Tetrachloroethene	8.43	ug/L	10	84.3	1.2	0-30	3/6/2015	3/6/2015
Ethylbenzene	9.84	ug/L	10	98.4	1.6	0-30	3/6/2015	3/6/2015
Chlorobenzene	9.82	ug/L	10	98.2	1.0	0-30	3/6/2015	3/6/2015
Benzene	9.87	ug/L	10	98.7	3.3	0-30	3/6/2015	3/6/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	1.0	0-30	3/6/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Benzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromoform	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Chlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroform	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Ethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Methylene chloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Naphthalene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Styrene	ND	ug/L	0.5	3/6/2015	3/6/2015
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Toluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Total Xylene	ND	ug/L	0.5	3/6/2015	3/6/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	3/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM	**Extraction Date**	03/04/15
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150303045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	96.3	10-125

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Naphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150303045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	100.9	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.78	ug/L	5	95.6	62-139	3/4/2015	3/6/2015
Acenaphthene	4.62	ug/L	5	92.4	70-135	3/4/2015	3/6/2015
Acenaphthylene	4.32	ug/L	5	86.4	71-121	3/4/2015	3/6/2015
Anthracene	4.62	ug/L	5	92.4	63-113	3/4/2015	3/6/2015
Benzo(ghi)perylene	4.58	ug/L	5	91.6	76-161	3/4/2015	3/6/2015
Benzo[a]anthracene	4.71	ug/L	5	94.2	79-142	3/4/2015	3/6/2015
Benzo[a]pyrene	4.38	ug/L	5	87.6	71-163	3/4/2015	3/6/2015
2-Methylnaphthalene	5.31	ug/L	5	106.2	56-128	3/4/2015	3/6/2015
Benzo[k]fluoranthene	4.57	ug/L	5	91.4	69-169	3/4/2015	3/6/2015
Pyrene	4.68	ug/L	5	93.6	80-119	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	4.53	ug/L	5	90.6	75-158	3/4/2015	3/6/2015
Fluoranthene	4.64	ug/L	5	92.8	74-120	3/4/2015	3/6/2015
Fluorene	4.48	ug/L	5	89.6	60-116	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.47	ug/L	5	89.4	72-160	3/4/2015	3/6/2015
Naphthalene	4.51	ug/L	5	90.2	51-122	3/4/2015	3/6/2015
Phenanthrene	4.66	ug/L	5	93.2	77-126	3/4/2015	3/6/2015
Benzo[b]fluoranthene	4.53	ug/L	5	90.6	69-168	3/4/2015	3/6/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.76	ug/L	5	95.2	0.4	0-50	3/4/2015	3/6/2015
Acenaphthene	4.54	ug/L	5	90.8	1.7	0-50	3/4/2015	3/6/2015
Acenaphthylene	4.33	ug/L	5	86.6	0.2	0-50	3/4/2015	3/6/2015
Anthracene	4.53	ug/L	5	90.6	2.0	0-50	3/4/2015	3/6/2015
Benzo(ghi)perylene	4.34	ug/L	5	86.8	5.4	0-50	3/4/2015	3/6/2015
Benzo[a]anthracene	4.78	ug/L	5	95.6	1.5	0-50	3/4/2015	3/6/2015
Benzo[a]pyrene	4.40	ug/L	5	88.0	0.5	0-50	3/4/2015	3/6/2015
2-Methylnaphthalene	5.26	ug/L	5	105.2	0.9	0-50	3/4/2015	3/6/2015
Benzo[k]fluoranthene	4.53	ug/L	5	90.6	0.9	0-50	3/4/2015	3/6/2015
Pyrene	4.66	ug/L	5	93.2	0.4	0-50	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	4.35	ug/L	5	87.0	4.1	0-50	3/4/2015	3/6/2015
Fluoranthene	4.67	ug/L	5	93.4	0.6	0-50	3/4/2015	3/6/2015
Fluorene	4.44	ug/L	5	88.8	0.9	0-50	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.31	ug/L	5	86.2	3.6	0-50	3/4/2015	3/6/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.45	ug/L	5	89.0	1.3	0-50	3/4/2015	3/6/2015
Phenanthrene	4.61	ug/L	5	92.2	1.1	0-50	3/4/2015	3/6/2015
Benzo[b]fluoranthene	4.82	ug/L	5	96.4	6.2	0-50	3/4/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/4/2015	3/6/2015
Acenaphthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Acenaphthylene	ND	ug/L	0.01	3/4/2015	3/6/2015
Anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Chrysene	ND	ug/L	0.01	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Fluorene	ND	ug/L	0.01	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Naphthalene	ND	ug/L	0.01	3/4/2015	3/6/2015
Phenanthrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150303045
Order Date: 3/3/2015

Contact Name: LAUREN CANDRENA
Project Name: SVL #W5B0488
Comment:

Sample #: 150303045-001 **Customer Sample #:** NSH-007-022615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 4 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:** 6:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/13/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Sample #: 150303045-002 **Customer Sample #:** NSH-095-022615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 4 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:** 6:20 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/13/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Sample #: 150303045-003 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 1 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Customer Name:	HALEY AND ALDRICH	**Order ID:**	150303045
	400 E. VAN BUREN ST	**Order Date:**	3/3/2015
	PHOENIX AZ 85004		
Contact Name:	LAUREN CANDRENA	**Project Name:**	SVL #W5B0488
Comment:			

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	1.9
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5B0488

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 4.2 4.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: HALEY AND ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E. VAN BUREN ST, SUITE 545, PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number: –
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N. 44th ST. SUITE 300, PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number: –
PO#:

Project Name: EXCELSIOR
Sampler's Signature: R.C. Gandr

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEMISTRY	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAHs	VOCs 524.3	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																								METALS SAMPLE WAS FIELD FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE WITH HNO_3.
1	NSH-007-022615	2/26/15	0600	CG	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2	NSH-095-022615	2/26/15	0620	CG	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
3																									
4	TRIP BLANK																					X			
5																									
6																									
7																									SHIPPED FEDEX TRACK# 8054 7023 1885
8																									
9																									
10																									

Relinquished by: R.C. Gandr	Date: 2/26/15	Time: 1400	Received by:	Date: 2-27-15	Time: 12:00
Relinquished by: S Jackson	Date: 3-2-15	Time: 1241	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/1

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-007-022615	W5B0488-01	Ground Water	26-Feb-15 06:00	CG	27-Feb-2015	
NSH-095-022615	W5B0488-02	Ground Water	26-Feb-15 06:20	CG	27-Feb-2015	
TRIP BLANK	W5B0488-03	Ground Water	26-Feb-15 00:00	CG	27-Feb-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Client Sample ID: **NSH-007-022615**
SVL Sample ID: **W5B0488-01 (Ground Water)**

Sampled: 26-Feb-15 06:00
Received: 27-Feb-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.04		W510003	MCE	03/03/15 15:47	
EPA 200.7	**Calcium**	48.9	mg/L	0.040	0.029		W510003	MCE	03/03/15 15:47	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.026		W510003	MCE	03/03/15 15:47	
EPA 200.7	**Magnesium**	17.0	mg/L	0.20	0.11		W510003	MCE	03/03/15 15:47	
EPA 200.7	**Potassium**	1.99	mg/L	0.50	0.17		W510003	MCE	03/03/15 15:53	
EPA 200.7	**Silica (SiO2)**	33.9	mg/L	0.17	0.12		W510003	MCE	03/03/15 15:47	
EPA 200.7	**Sodium**	23.3	mg/L	0.50	0.05		W510003	MCE	03/03/15 15:47	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00019		W510031	KWH	03/11/15 08:26	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00027		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Barium**	0.0364	mg/L	0.00100	0.000099		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Beryllium**	0.00021	mg/L	0.00020	0.000048		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Boron**	0.0331	mg/L	0.0050	0.0012		W510031	KWH	03/11/15 08:26	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000072		W510031	KWH	03/11/15 08:26	
EPA 200.8	Chromium	< 0.0015	mg/L	0.0015	0.0004		W510031	KWH	03/11/15 08:26	
EPA 200.8	Cobalt	< 0.00100	mg/L	0.00100	0.000054		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Copper**	0.00624	mg/L	0.00100	0.00015		W510031	KWH	03/11/15 08:26	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.000031		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Manganese**	0.00150	mg/L	0.00100	0.000025		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Molybdenum**	0.0248	mg/L	0.00100	0.00009		W510031	KWH	03/11/15 08:26	
EPA 200.8	Nickel	< 0.0010	mg/L	0.0010	0.0004		W510031	KWH	03/11/15 08:26	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0006		W510031	KWH	03/11/15 08:26	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000021		W510031	KWH	03/11/15 08:26	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.000026		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Uranium**	0.00490	mg/L	0.00100	0.000014		W510031	KWH	03/11/15 08:26	
EPA 200.8	Vanadium	< 0.0030	mg/L	0.0030	0.0009		W510031	KWH	03/11/15 08:26	
EPA 200.8	**Zinc**	0.854	mg/L	0.0050	0.0010		W510031	KWH	03/11/15 08:26	M3
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.00004		W510130	STA	03/10/15 13:02	
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	188	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:14	
SM 2320B	**Bicarbonate**	188	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:14	
SM 2320B	Carbonate	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:14	
SM 2320B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:14	
SM 2510 B	**Specific conductance**	432	µmhos/cm	5.00			W509266	JDM	03/02/15 12:45	
SM 2540 C	**Total Diss. Solids**	315	mg/L	10			W509260	JDM	03/02/15 15:35	
SM 4500 H B	**pH @22.0°C**	7.79	pH Units				W510041	DKS	03/05/15 09:14	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0025		W511011	VRH	03/09/15 10:47	
SM 4500-P-E	Orthophosphate as P	< 0.010	mg/L	0.010	0.004		W509252	SM	02/27/15 14:28	
SM 4500-S-F	Sulfide	< 1.00	mg/L	1.00	0.27		W510174	SM	03/05/15 15:21	
SM 5310B	Total Organic Carbon	< 1.00	mg/L	1.00	0.24		W511054	SM	03/10/15 15:50	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Client Sample ID: **NSH-007-022615**
SVL Sample ID: **W5B0488-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 26-Feb-15 06:00
Received: 27-Feb-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	23.1	mg/L	2.00	0.56	10	W509241	JMW	02/27/15 13:49	D2
EPA 300.0	**Fluoride**	2.14	mg/L	0.100	0.022		W509241	JMW	02/27/15 13:17	
EPA 300.0	**Nitrate as N**	2.26	mg/L	0.050	0.008		W509241	JMW	02/27/15 13:17	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.014		W509241	JMW	02/27/15 13:17	
EPA 300.0	**Sulfate as SO4**	14.7	mg/L	0.30	0.05		W509241	JMW	02/27/15 13:17	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.94 meq/L Anion Sum: 4.99 meq/L C/A Balance: -0.55 % Calculated TDS: 288 TDS/cTDS: 1.09 TDS/eC: 0.73

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Client Sample ID: **NSH-095-022615**
SVL Sample ID: **W5B0488-02 (Ground Water)**

Sampled: 26-Feb-15 06:20
Received: 27-Feb-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.04		W510003	MCE	03/03/15 15:55	
EPA 200.7	**Calcium**	48.9	mg/L	0.040	0.029		W510003	MCE	03/03/15 15:55	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.026		W510003	MCE	03/03/15 15:55	
EPA 200.7	**Magnesium**	16.9	mg/L	0.20	0.11		W510003	MCE	03/03/15 15:55	
EPA 200.7	**Potassium**	1.98	mg/L	0.50	0.17		W510003	MCE	03/03/15 16:02	
EPA 200.7	**Silica (SiO2)**	33.9	mg/L	0.17	0.12		W510003	MCE	03/03/15 15:55	
EPA 200.7	**Sodium**	23.7	mg/L	0.50	0.05		W510003	MCE	03/03/15 15:55	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00019		W510031	KWH	03/11/15 08:41	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00027		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Barium**	0.0374	mg/L	0.00100	0.000099		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Beryllium**	0.00020	mg/L	0.00020	0.000048		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Boron**	0.0342	mg/L	0.0050	0.0012		W510031	KWH	03/11/15 08:41	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000072		W510031	KWH	03/11/15 08:41	
EPA 200.8	Chromium	< 0.0015	mg/L	0.0015	0.0004		W510031	KWH	03/11/15 08:41	
EPA 200.8	Cobalt	< 0.00100	mg/L	0.00100	0.000054		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Copper**	0.00642	mg/L	0.00100	0.00015		W510031	KWH	03/11/15 08:41	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.000031		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Manganese**	0.00153	mg/L	0.00100	0.000025		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Molybdenum**	0.0243	mg/L	0.00100	0.00009		W510031	KWH	03/11/15 08:41	
EPA 200.8	Nickel	< 0.0010	mg/L	0.0010	0.0004		W510031	KWH	03/11/15 08:41	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0006		W510031	KWH	03/11/15 08:41	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000021		W510031	KWH	03/11/15 08:41	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.000026		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Uranium**	0.00505	mg/L	0.00100	0.000014		W510031	KWH	03/11/15 08:41	
EPA 200.8	Vanadium	< 0.0030	mg/L	0.0030	0.0009		W510031	KWH	03/11/15 08:41	
EPA 200.8	**Zinc**	0.922	mg/L	0.0050	0.0010		W510031	KWH	03/11/15 08:41	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.00004		W510130	STA	03/10/15 13:03	
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	189	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:20	
SM 2320B	**Bicarbonate**	189	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:20	
SM 2320B	Carbonate	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:20	
SM 2320B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 09:20	
SM 2510 B	**Specific conductance**	419	µmhos/cm	5.00			W509266	JDM	03/02/15 12:45	
SM 2540 C	**Total Diss. Solids**	240	mg/L	10			W509260	JDM	03/02/15 15:35	
SM 4500 H B	**pH @20.0°C**	7.84	pH Units				W510041	DKS	03/05/15 09:20	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0025		W511011	VRH	03/09/15 10:49	
SM 4500-P-E	Orthophosphate as P	< 0.010	mg/L	0.010	0.004		W509252	SM	02/27/15 14:28	
SM 4500-S-F	Sulfide	< 1.00	mg/L	1.00	0.27		W510174	SM	03/05/15 15:21	
SM 5310B	Total Organic Carbon	< 1.00	mg/L	1.00	0.24		W511054	SM	03/10/15 14:53	

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Client Sample ID: **NSH-095-022615**
SVL Sample ID: **W5B0488-02 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 26-Feb-15 06:20
Received: 27-Feb-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	23.1	mg/L	2.00	0.56	10	W509241	JMW	02/27/15 14:01	D2
EPA 300.0	**Fluoride**	2.11	mg/L	0.100	0.022		W509241	JMW	02/27/15 13:30	
EPA 300.0	**Nitrate as N**	2.26	mg/L	0.050	0.008		W509241	JMW	02/27/15 13:30	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.014		W509241	JMW	02/27/15 13:30	
EPA 300.0	**Sulfate as SO4**	14.7	mg/L	0.30	0.05		W509241	JMW	02/27/15 13:30	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.95 meq/L Anion Sum: 5.01 meq/L C/A Balance: -0.62 % Calculated TDS: 289 TDS/cTDS: 0.83 TDS/eC: 0.57

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.08	0.04	0.08	W510003	03-Mar-15	
EPA 200.7	Calcium	mg/L	<0.040	0.029	0.040	W510003	03-Mar-15	
EPA 200.7	Iron	mg/L	<0.060	0.026	0.060	W510003	03-Mar-15	
EPA 200.7	Magnesium	mg/L	<0.20	0.11	0.20	W510003	03-Mar-15	
EPA 200.7	Potassium	mg/L	<0.50	0.17	0.50	W510003	03-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	<0.17	0.12	0.17	W510003	03-Mar-15	
EPA 200.7	Sodium	mg/L	<0.50	0.05	0.50	W510003	03-Mar-15	
EPA 200.8	Antimony	mg/L	<0.00300	0.00019	0.00300	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	<0.00300	0.00027	0.00300	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	<0.00100	0.000099	0.00100	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	<0.00020	0.000048	0.00020	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	<0.0050	0.0012	0.0050	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	<0.00020	0.000072	0.00020	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	<0.0015	0.0004	0.0015	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	<0.00100	0.000054	0.00100	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	<0.00100	0.00015	0.00100	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	<0.00300	0.000031	0.00300	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	<0.00100	0.000025	0.00100	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	<0.00100	0.00009	0.00100	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	<0.0010	0.0004	0.0010	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	<0.0030	0.0006	0.0030	W510031	11-Mar-15	
EPA 200.8	Silver	mg/L	<0.000100	0.000021	0.000100	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	<0.00100	0.000026	0.00100	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	<0.00100	0.000014	0.00100	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	<0.0030	0.0009	0.0030	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	<0.0050	0.0010	0.0050	W510031	11-Mar-15	
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00020	0.00004	0.00020	W510130	10-Mar-15	
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Hydroxide	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W509260	02-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0025	0.0100	W511011	09-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	<0.010	0.004	0.010	W509252	27-Feb-15	
SM 4500-S-F	Sulfide	mg/L	<1.00	0.27	1.00	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	<1.00	0.24	1.00	W511054	10-Mar-15	
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.20	0.06	0.20	W509241	27-Feb-15	
EPA 300.0	Fluoride	mg/L	<0.100	0.022	0.100	W509241	27-Feb-15	
EPA 300.0	Nitrate as N	mg/L	<0.050	0.008	0.050	W509241	27-Feb-15	
EPA 300.0	Nitrite as N	mg/L	<0.050	0.014	0.050	W509241	27-Feb-15	
EPA 300.0	Sulfate as SO4	mg/L	<0.30	0.05	0.30	W509241	27-Feb-15	

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Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.14	1.00	114	85 - 115	W510003	03-Mar-15	
EPA 200.7	Calcium	mg/L	20.8	20.0	104	85 - 115	W510003	03-Mar-15	
EPA 200.7	Iron	mg/L	11.1	10.0	111	85 - 115	W510003	03-Mar-15	
EPA 200.7	Magnesium	mg/L	22.4	20.0	112	85 - 115	W510003	03-Mar-15	
EPA 200.7	Potassium	mg/L	21.8	20.0	109	85 - 115	W510003	03-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	11.6	10.7	109	85 - 115	W510003	03-Mar-15	
EPA 200.7	Sodium	mg/L	20.3	19.0	107	85 - 115	W510003	03-Mar-15	
EPA 200.8	Antimony	mg/L	0.0248	0.0250	99.3	85 - 115	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0267	0.0250	107	85 - 115	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0254	0.0250	102	85 - 115	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0259	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0257	0.0250	103	85 - 115	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0253	0.0250	101	85 - 115	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0261	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0257	0.0250	103	85 - 115	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0262	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0250	0.0250	100	85 - 115	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0261	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0249	0.0250	99.5	85 - 115	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0282	0.0250	113	85 - 115	W510031	11-Mar-15	
EPA 200.8	Silver	mg/L	0.0267	0.0250	107	85 - 115	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0250	100	85 - 115	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0252	0.0250	101	85 - 115	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0263	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.0273	0.0250	109	85 - 115	W510031	11-Mar-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00512	0.00500	102	85 - 115	W510130	10-Mar-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.8	99.3	97.5	85 - 115	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.8	99.3	97.5	85 - 115	W510041	05-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	314	306	103	90 - 110	W509266	02-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.151	0.150	101	90 - 110	W511011	09-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.765	0.786	97.3	90 - 110	W509252	27-Feb-15	
SM 4500-S-F	Sulfide	mg/L	2.62	2.50	105	80 - 120	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	32.7	34.3	95.2	90 - 110	W511054	10-Mar-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	3.13	3.00	104	90 - 110	W509241	27-Feb-15	
EPA 300.0	Fluoride	mg/L	2.03	2.00	102	90 - 110	W509241	27-Feb-15	
EPA 300.0	Nitrate as N	mg/L	2.08	2.00	104	90 - 110	W509241	27-Feb-15	
EPA 300.0	Nitrite as N	mg/L	2.60	2.50	104	90 - 110	W509241	27-Feb-15	
EPA 300.0	Sulfate as SO4	mg/L	10.5	10.0	105	90 - 110	W509241	27-Feb-15	

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	189	188	0.6	20	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	189	188	0.6	20	W510041	05-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	<1.0	<1.0	UDL	20	W510041	05-Mar-15	
SM 2320B	Hydroxide	mg/L as CaCO3	<1.0	<1.0	UDL	20	W510041	05-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	403	432	6.9	20	W509266	02-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	321	326	1.6	10	W509260	02-Mar-15	
SM 4500 H B	pH	pH Units	7.75	7.79	0.5	20	W510041	05-Mar-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	3.65	2.54	1.00	111	70 - 130	W510003	03-Mar-15	
EPA 200.7	Calcium	mg/L	93.3	72.8	20.0	102	70 - 130	W510003	03-Mar-15	
EPA 200.7	Iron	mg/L	11.7	1.00	10.0	107	70 - 130	W510003	03-Mar-15	
EPA 200.7	Magnesium	mg/L	38.0	16.0	20.0	110	70 - 130	W510003	03-Mar-15	
EPA 200.7	Potassium	mg/L	30.4	9.08	20.0	106	70 - 130	W510003	03-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	22.2	10.5	10.7	110	70 - 130	W510003	03-Mar-15	
EPA 200.7	Sodium	mg/L	20.4	<0.50	19.0	105	70 - 130	W510003	03-Mar-15	
EPA 200.8	Antimony	mg/L	0.0270	<0.00300	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0329	<0.00300	0.0250	128	70 - 130	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0635	0.0364	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0290	0.00021	0.0250	115	70 - 130	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0614	0.0331	0.0250	113	70 - 130	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.00020	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0286	<0.0015	0.0250	114	70 - 130	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0271	<0.00100	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0332	0.00624	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0258	<0.00300	0.0250	103	70 - 130	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0300	0.00150	0.0250	114	70 - 130	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0518	0.0248	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0270	<0.0010	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0362	<0.0030	0.0250	141	70 - 130	W510031	11-Mar-15	M1
EPA 200.8	Silver	mg/L	0.0268	<0.000100	0.0250	107	70 - 130	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0259	<0.00100	0.0250	104	70 - 130	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0322	0.00490	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0314	<0.0030	0.0250	117	70 - 130	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.915	0.854	0.0250	R > 4S	70 - 130	W510031	11-Mar-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00103	<0.00020	0.00100	103	70 - 130	W510130	10-Mar-15	
EPA 245.1	Mercury	mg/L	0.00102	<0.00020	0.00100	102	70 - 130	W510130	10-Mar-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0850	<0.0100	0.100	85.0	75 - 125	W511011	09-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.488	<0.010	0.500	97.5	75 - 125	W509252	27-Feb-15	
SM 4500-S-F	Sulfide	mg/L	2.42	<1.00	2.50	96.8	80 - 120	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	50.6	<1.00	50.0	101	80 - 120	W511054	10-Mar-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	4.78	1.42	3.00	112	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Chloride	mg/L	56.9	54.8	3.00	R > 4S	90 - 110	W509241	27-Feb-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.33	0.200	2.00	107	90 - 110	W509241	27-Feb-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Fluoride	mg/L	2.63	0.424	2.00	110	90 - 110	W509241	27-Feb-15	
EPA 300.0	Nitrate as N	mg/L	2.26	<0.050	2.00	111	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Nitrate as N	mg/L	2.69	0.204	2.00	124	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Nitrite as N	mg/L	2.42	<0.050	2.00	121	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Nitrite as N	mg/L	2.92	<0.050	2.00	146	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Sulfate as SO4	mg/L	16.7	5.37	10.0	114	90 - 110	W509241	27-Feb-15	M1
EPA 300.0	Sulfate as SO4	mg/L	197	187	10.0	94.8	90 - 110	W509241	27-Feb-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	3.66	3.65	1.00	112	0.2	20	W510003	03-Mar-15	
EPA 200.7	Calcium	mg/L	93.6	93.3	20.0	104	0.4	20	W510003	03-Mar-15	
EPA 200.7	Iron	mg/L	11.9	11.7	10.0	109	1.2	20	W510003	03-Mar-15	
EPA 200.7	Magnesium	mg/L	38.2	38.0	20.0	111	0.7	20	W510003	03-Mar-15	
EPA 200.7	Potassium	mg/L	30.7	30.4	20.0	108	1.3	20	W510003	03-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	22.4	22.2	10.7	112	0.9	20	W510003	03-Mar-15	
EPA 200.7	Sodium	mg/L	20.8	20.4	19.0	108	2.1	20	W510003	03-Mar-15	
EPA 200.8	Antimony	mg/L	0.0266	0.0270	0.0250	107	1.2	20	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0319	0.0329	0.0250	124	3.0	20	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0626	0.0635	0.0250	105	1.4	20	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0290	0.0290	0.0250	115	0.0	20	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0617	0.0614	0.0250	115	0.6	20	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0264	0.0269	0.0250	106	1.9	20	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0275	0.0286	0.0250	110	3.9	20	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0263	0.0271	0.0250	105	3.2	20	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0320	0.0332	0.0250	103	3.5	20	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0253	0.0258	0.0250	101	1.8	20	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0286	0.0300	0.0250	108	5.0	20	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0505	0.0518	0.0250	103	2.5	20	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0270	0.0250	103	4.4	20	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0357	0.0362	0.0250	138	1.6	20	W510031	11-Mar-15	M1
EPA 200.8	Silver	mg/L	0.0265	0.0268	0.0250	106	1.1	20	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0255	0.0259	0.0250	102	1.6	20	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0314	0.0322	0.0250	106	2.5	20	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0304	0.0314	0.0250	113	3.3	20	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.894	0.915	0.0250	R > 4S	2.3	20	W510031	11-Mar-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00104	0.00103	0.00100	104	1.0	20	W510130	10-Mar-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	0.0850	0.100	102	18.2	20	W511011	09-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.492	0.488	0.500	98.5	1.0	20	W509252	27-Feb-15	
SM 4500-S-F	Sulfide	mg/L	2.30	2.42	2.50	91.9	5.1	20	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	48.4	50.6	50.0	96.9	4.5	20	W511054	10-Mar-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	4.84	4.78	3.00	114	1.3	20	W509241	27-Feb-15	M1
EPA 300.0	Fluoride	mg/L	2.37	2.33	2.00	108	1.5	20	W509241	27-Feb-15	
EPA 300.0	Nitrate as N	mg/L	2.30	2.26	2.00	113	1.8	20	W509241	27-Feb-15	M1

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Excelsior Mining Corp.
400 E. Van Buren St. #545
Phoenix, AZ 85004

Project Name: Gunnison Copper 2015
Work Order: **W5B0488**
Reported: 13-Mar-15 08:56

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)											
EPA 300.0	Nitrite as N	mg/L	2.47	2.42	2.00	124	2.0	20	W509241	27-Feb-15	M1
EPA 300.0	Sulfate as SO4	mg/L	17.0	16.7	10.0	117	1.7	20	W509241	27-Feb-15	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM		
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM		
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM			
Matrix	Water	**Sample Location**	W5B0488-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	0.59	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.0	70-130
Bromofluorobenzene	EPA 524.3	98.2	70-130
Toluene-d8	EPA 524.3	97.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM		
Matrix	Water	**Sample Location**	W5B0488-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM		
Matrix	Water	**Sample Location**	W5B0488-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM			
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	0.58	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.2	70-130
Bromofluorobenzene	EPA 524.3	96.0	70-130
Toluene-d8	EPA 524.3	98.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5B0488-03			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5B0488-03			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-003	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5B0488-03		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150303045-003

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.8	70-130
Bromofluorobenzene	EPA 524.3	94.4	70-130
Toluene-d8	EPA 524.3	94.4	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
Toluene	10.3	ug/L	10	103.0	70-130	3/6/2015	3/6/2015
Tetrachloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
Ethylbenzene	10.4	ug/L	10	104.0	70-130	3/6/2015	3/6/2015
Chlorobenzene	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
Benzene	9.93	ug/L	10	99.3	70-130	3/6/2015	3/6/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150303020-001	Trichloroethene	ND	9.47	ug/L	10	94.7	70-130	3/6/2015	3/6/2015
150303020-001	Toluene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
150303020-001	Tetrachloroethene	ND	8.33	ug/L	10	83.3	70-130	3/6/2015	3/6/2015
150303020-001	Ethylbenzene	ND	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
150303020-001	Chlorobenzene	ND	9.72	ug/L	10	97.2	70-130	3/6/2015	3/6/2015
150303020-001	Benzene	ND	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
150303020-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.32	ug/L	10	93.2	1.6	0-30	3/6/2015	3/6/2015
Toluene	10.1	ug/L	10	101.0	3.9	0-30	3/6/2015	3/6/2015
Tetrachloroethene	8.43	ug/L	10	84.3	1.2	0-30	3/6/2015	3/6/2015
Ethylbenzene	9.84	ug/L	10	98.4	1.6	0-30	3/6/2015	3/6/2015
Chlorobenzene	9.82	ug/L	10	98.2	1.0	0-30	3/6/2015	3/6/2015
Benzene	9.87	ug/L	10	98.7	3.3	0-30	3/6/2015	3/6/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	1.0	0-30	3/6/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Benzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromoform	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Chlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroform	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Ethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Methylene chloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Naphthalene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Styrene	ND	ug/L	0.5	3/6/2015	3/6/2015
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Toluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Total Xylene	ND	ug/L	0.5	3/6/2015	3/6/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	3/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015 10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM	**Extraction Date**	03/04/15
Matrix	Water	**Sample Location**	W5B0488-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

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Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-001	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-007-022615	**Sampling Time**	6:00 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150303045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	96.3	10-125

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Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

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Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Sample Number	150303045-002	**Sampling Date**	2/26/2015	**Date/Time Received**	3/3/2015	10:30 AM
Client Sample ID	NSH-095-022615	**Sampling Time**	6:20 AM	**Extraction Date**	03/04/15	
Matrix	Water	**Sample Location**	W5B0488-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Naphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150303045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	100.9	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.78	ug/L	5	95.6	62-139	3/4/2015	3/6/2015
Acenaphthene	4.62	ug/L	5	92.4	70-135	3/4/2015	3/6/2015
Acenaphthylene	4.32	ug/L	5	86.4	71-121	3/4/2015	3/6/2015
Anthracene	4.62	ug/L	5	92.4	63-113	3/4/2015	3/6/2015
Benzo(ghi)perylene	4.58	ug/L	5	91.6	76-161	3/4/2015	3/6/2015
Benzo[a]anthracene	4.71	ug/L	5	94.2	79-142	3/4/2015	3/6/2015
Benzo[a]pyrene	4.38	ug/L	5	87.6	71-163	3/4/2015	3/6/2015
2-Methylnaphthalene	5.31	ug/L	5	106.2	56-128	3/4/2015	3/6/2015
Benzo[k]fluoranthene	4.57	ug/L	5	91.4	69-169	3/4/2015	3/6/2015
Pyrene	4.68	ug/L	5	93.6	80-119	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	4.53	ug/L	5	90.6	75-158	3/4/2015	3/6/2015
Fluoranthene	4.64	ug/L	5	92.8	74-120	3/4/2015	3/6/2015
Fluorene	4.48	ug/L	5	89.6	60-116	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.47	ug/L	5	89.4	72-160	3/4/2015	3/6/2015
Naphthalene	4.51	ug/L	5	90.2	51-122	3/4/2015	3/6/2015
Phenanthrene	4.66	ug/L	5	93.2	77-126	3/4/2015	3/6/2015
Benzo[b]fluoranthene	4.53	ug/L	5	90.6	69-168	3/4/2015	3/6/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.76	ug/L	5	95.2	0.4	0-50	3/4/2015	3/6/2015
Acenaphthene	4.54	ug/L	5	90.8	1.7	0-50	3/4/2015	3/6/2015
Acenaphthylene	4.33	ug/L	5	86.6	0.2	0-50	3/4/2015	3/6/2015
Anthracene	4.53	ug/L	5	90.6	2.0	0-50	3/4/2015	3/6/2015
Benzo(ghi)perylene	4.34	ug/L	5	86.8	5.4	0-50	3/4/2015	3/6/2015
Benzo[a]anthracene	4.78	ug/L	5	95.6	1.5	0-50	3/4/2015	3/6/2015
Benzo[a]pyrene	4.40	ug/L	5	88.0	0.5	0-50	3/4/2015	3/6/2015
2-Methylnaphthalene	5.26	ug/L	5	105.2	0.9	0-50	3/4/2015	3/6/2015
Benzo[k]fluoranthene	4.53	ug/L	5	90.6	0.9	0-50	3/4/2015	3/6/2015
Pyrene	4.66	ug/L	5	93.2	0.4	0-50	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	4.35	ug/L	5	87.0	4.1	0-50	3/4/2015	3/6/2015
Fluoranthene	4.67	ug/L	5	93.4	0.6	0-50	3/4/2015	3/6/2015
Fluorene	4.44	ug/L	5	88.8	0.9	0-50	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.31	ug/L	5	86.2	3.6	0-50	3/4/2015	3/6/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150303045
Project Name: SVL #W5B0488

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.45	ug/L	5	89.0	1.3	0-50	3/4/2015	3/6/2015
Phenanthrene	4.61	ug/L	5	92.2	1.1	0-50	3/4/2015	3/6/2015
Benzo[b]fluoranthene	4.82	ug/L	5	96.4	6.2	0-50	3/4/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/4/2015	3/6/2015
Acenaphthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Acenaphthylene	ND	ug/L	0.01	3/4/2015	3/6/2015
Anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Chrysene	ND	ug/L	0.01	3/4/2015	3/6/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/4/2015	3/6/2015
Fluoranthene	ND	ug/L	0.01	3/4/2015	3/6/2015
Fluorene	ND	ug/L	0.01	3/4/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Naphthalene	ND	ug/L	0.01	3/4/2015	3/6/2015
Phenanthrene	ND	ug/L	0.01	3/4/2015	3/6/2015
Pyrene	ND	ug/L	0.01	3/4/2015	3/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150303045
Order Date: 3/3/2015

Contact Name: LAUREN CANDRENA
Project Name: SVL #W5B0488
Comment:

Sample #: 150303045-001 **Customer Sample #:** NSH-007-022615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 4 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:** 6:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/13/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Sample #: 150303045-002 **Customer Sample #:** NSH-095-022615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 4 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:** 6:20 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/13/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Sample #: 150303045-003 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 2/26/2015
Quantity: 1 **Date Received:** 3/3/2015 10:30:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	3/13/2015	***Normal (~10 Days)***

Customer Name:	HALEY AND ALDRICH	**Order ID:**	150303045
	400 E. VAN BUREN ST	**Order Date:**	3/3/2015
	PHOENIX AZ 85004		
Contact Name:	LAUREN CANDRENA	**Project Name:**	SVL #W5B0488
Comment:			

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	1.9
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5B0488

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 4.2 4.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: HALEY AND ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E. VAN BUREN ST, SUITE 545, PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number: –
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N. 44th ST. SUITE 300, PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number: –
PO#:

Project Name: EXCELSIOR
Sampler's Signature: R.C. Gandr

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEMISTRY	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAHs	VOCs 524.3	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																								METALS SAMPLE WAS FIELD FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE WITH HNO_3.
1	NSH-007-022615	2/26/15	0600	CG	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2	NSH-095-022615	2/26/15	0620	CG	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
3																									
4	TRIP BLANK																					X			
5																									
6																									
7																									SHIPPED FEDEX TRACK# 8054 7023 1885
8																									
9																									
10																									

Relinquished by: R.C. Gandr	Date: 2/26/15	Time: 1400	Received by:	Date: 2-27-15	Time: 12:00
Relinquished by: S Jackson	Date: 3-2-15	Time: 1241	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-001	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	NSH-023-030315	**Sampling Time**	3:00 PM	**Extraction Date**		
Matrix	Water	**Sample Location**	W5C0031-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-001	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	NSH-023-030315	**Sampling Time**	3:00 PM	**Extraction Date**		
Matrix	Water	**Sample Location**	W5C0031-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-001	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015 11:00 AM
Client Sample ID	NSH-023-030315	**Sampling Time**	3:00 PM	**Extraction Date**	
Matrix	Water	**Sample Location**	W5C0031-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150305021-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.0	70-130
Bromofluorobenzene	EPA 524.3	93.4	70-130
Toluene-d8	EPA 524.3	97.6	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-002	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	TRIP BLANK	**Sampling Time**		**Extraction Date**		
Matrix	Water	**Sample Location**	W5C0031-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Acetone	17.9	ug/L	2.5	3/6/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-002	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	TRIP BLANK	**Sampling Time**		**Extraction Date**		
Matrix	Water	**Sample Location**	W5C0031-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-002	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	TRIP BLANK	**Sampling Time**		**Extraction Date**		
Matrix	Water	**Sample Location**	W5C0031-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150305021-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.2	70-130
Bromofluorobenzene	EPA 524.3	84.6	70-130
Toluene-d8	EPA 524.3	93.0	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
Toluene	10.3	ug/L	10	103.0	70-130	3/6/2015	3/6/2015
Tetrachloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
Ethylbenzene	10.4	ug/L	10	104.0	70-130	3/6/2015	3/6/2015
Chlorobenzene	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
Benzene	9.93	ug/L	10	99.3	70-130	3/6/2015	3/6/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150303020-001	Trichloroethene	ND	9.47	ug/L	10	94.7	70-130	3/6/2015	3/6/2015
150303020-001	Toluene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015
150303020-001	Tetrachloroethene	ND	8.33	ug/L	10	83.3	70-130	3/6/2015	3/6/2015
150303020-001	Ethylbenzene	ND	10.0	ug/L	10	100.0	70-130	3/6/2015	3/6/2015
150303020-001	Chlorobenzene	ND	9.72	ug/L	10	97.2	70-130	3/6/2015	3/6/2015
150303020-001	Benzene	ND	10.2	ug/L	10	102.0	70-130	3/6/2015	3/6/2015
150303020-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	3/6/2015	3/6/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.32	ug/L	10	93.2	1.6	0-30	3/6/2015	3/6/2015
Toluene	10.1	ug/L	10	101.0	3.9	0-30	3/6/2015	3/6/2015
Tetrachloroethene	8.43	ug/L	10	84.3	1.2	0-30	3/6/2015	3/6/2015
Ethylbenzene	9.84	ug/L	10	98.4	1.6	0-30	3/6/2015	3/6/2015
Chlorobenzene	9.82	ug/L	10	98.2	1.0	0-30	3/6/2015	3/6/2015
Benzene	9.87	ug/L	10	98.7	3.3	0-30	3/6/2015	3/6/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	1.0	0-30	3/6/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,1-dichloropropene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/6/2015	3/6/2015
2-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
4-Chlorotoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Acetone	ND	ug/L	2.5	3/6/2015	3/6/2015
Benzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromodichloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromoform	ND	ug/L	0.5	3/6/2015	3/6/2015
Bromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Chlorobenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloroform	ND	ug/L	0.5	3/6/2015	3/6/2015
Chloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromochloromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dibromomethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Ethylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015

Comments:

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Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	3/6/2015	3/6/2015
Isopropylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Methylene chloride	ND	ug/L	0.5	3/6/2015	3/6/2015
Naphthalene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
n-Propylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
p-isopropyltoluene	ND	ug/L	0.5	3/6/2015	3/6/2015
sec-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Styrene	ND	ug/L	0.5	3/6/2015	3/6/2015
tert-Butylbenzene	ND	ug/L	0.5	3/6/2015	3/6/2015
Tetrachloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Toluene	ND	ug/L	0.5	3/6/2015	3/6/2015
Total Xylene	ND	ug/L	0.5	3/6/2015	3/6/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichloroethene	ND	ug/L	0.5	3/6/2015	3/6/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/6/2015	3/6/2015
Vinyl Chloride	ND	ug/L	0.5	3/6/2015	3/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Vial Number: 0
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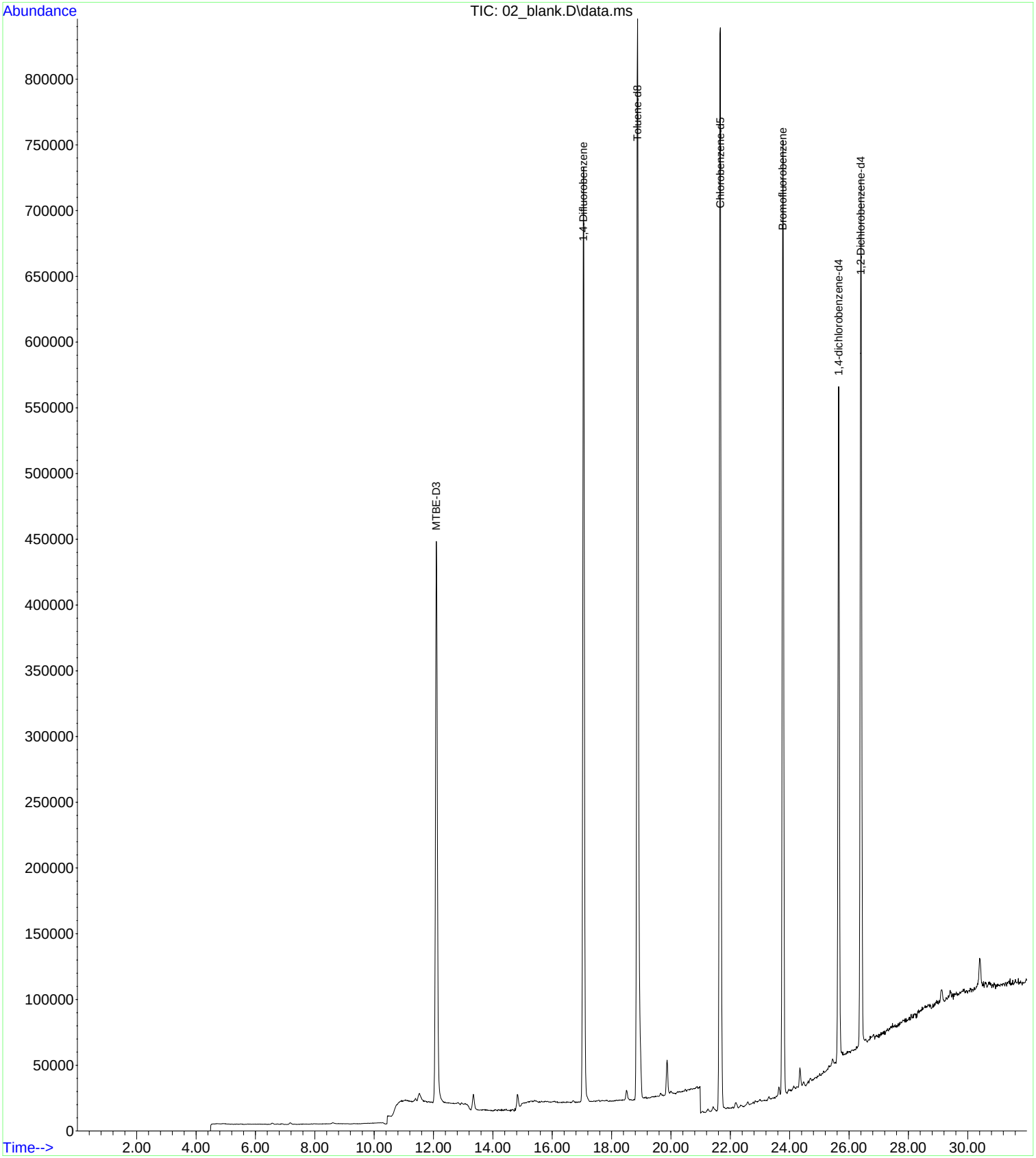

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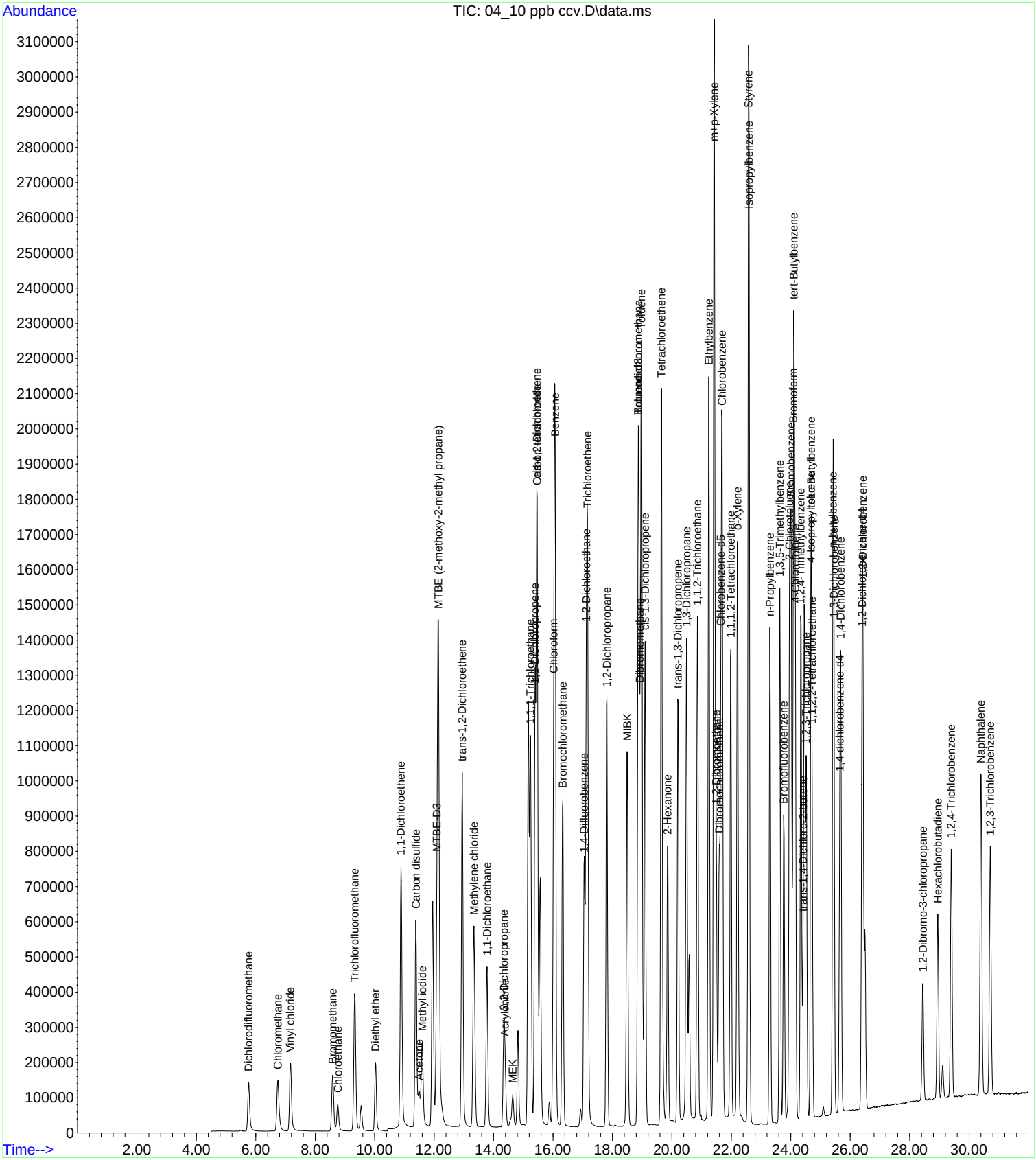
Vial Number: 0



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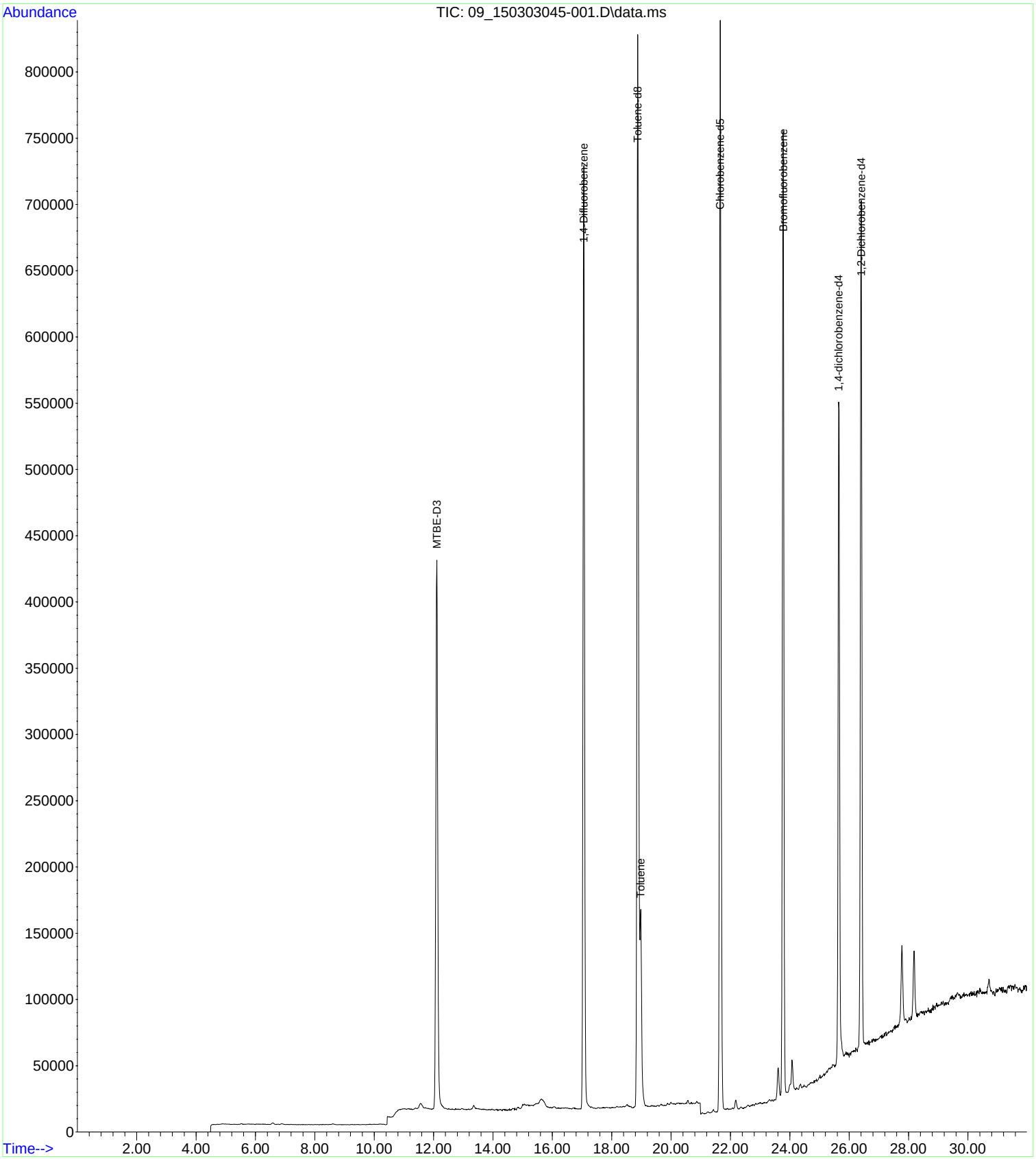
Vial Number: 0



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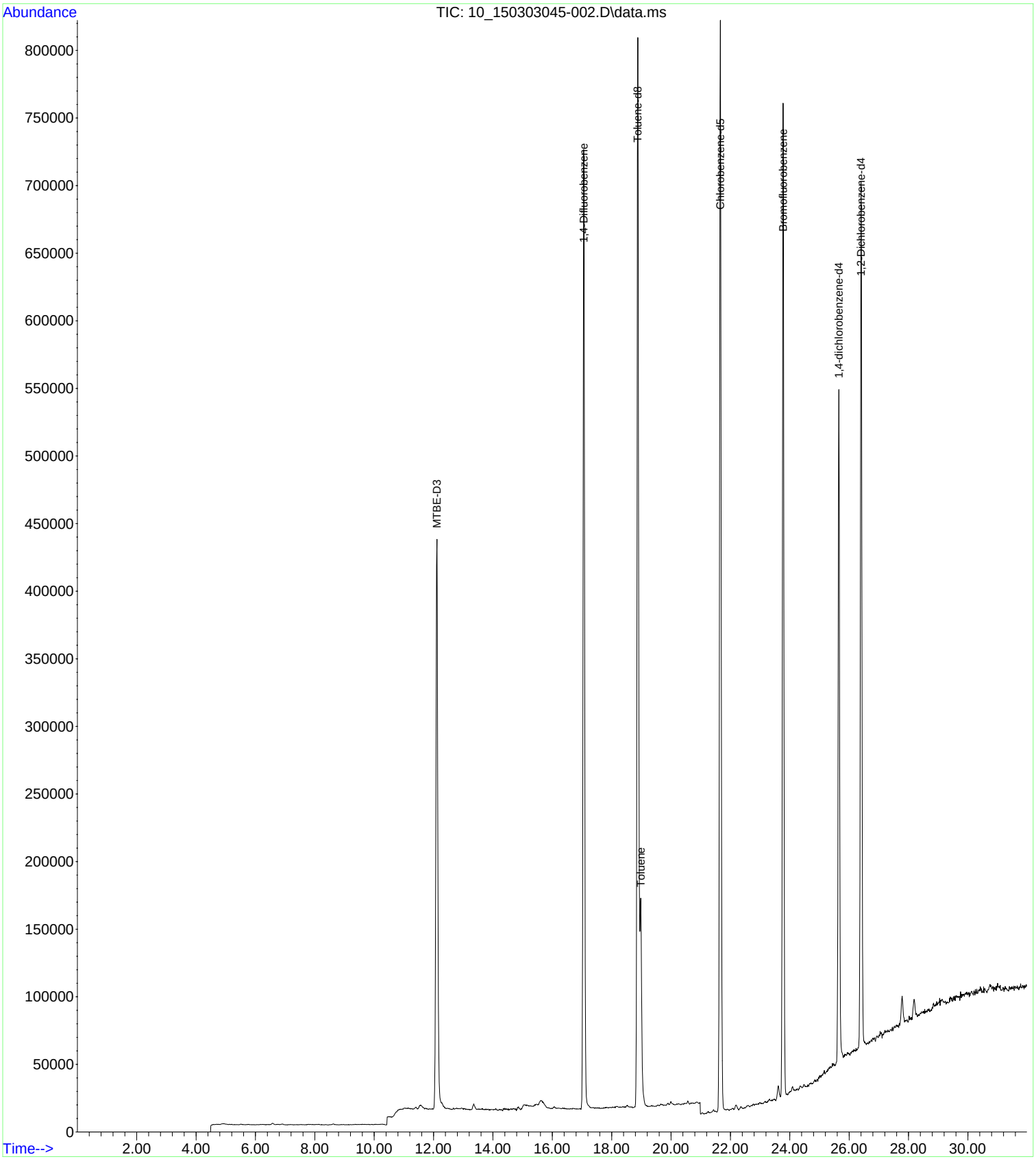

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Operator : SAT
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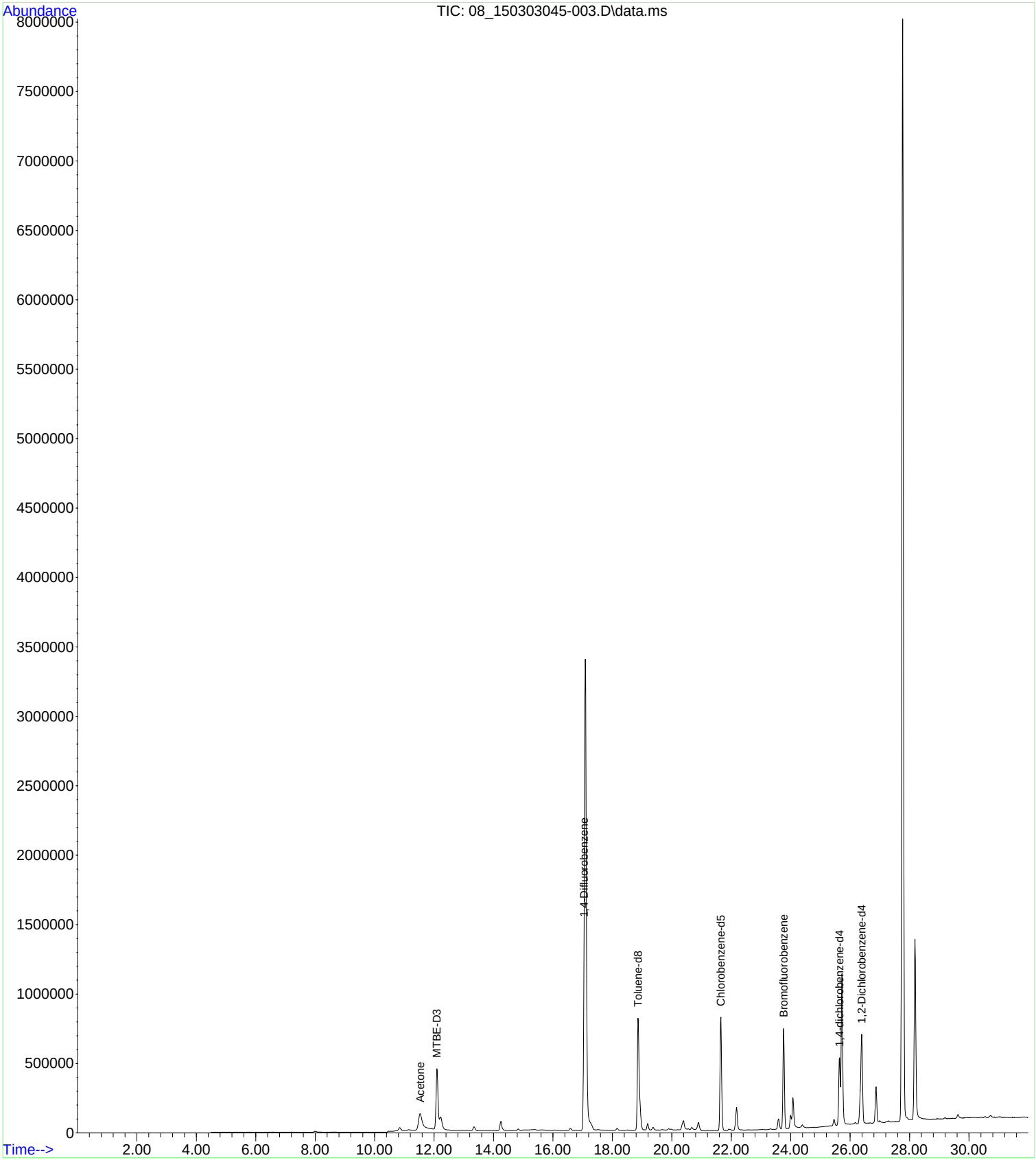
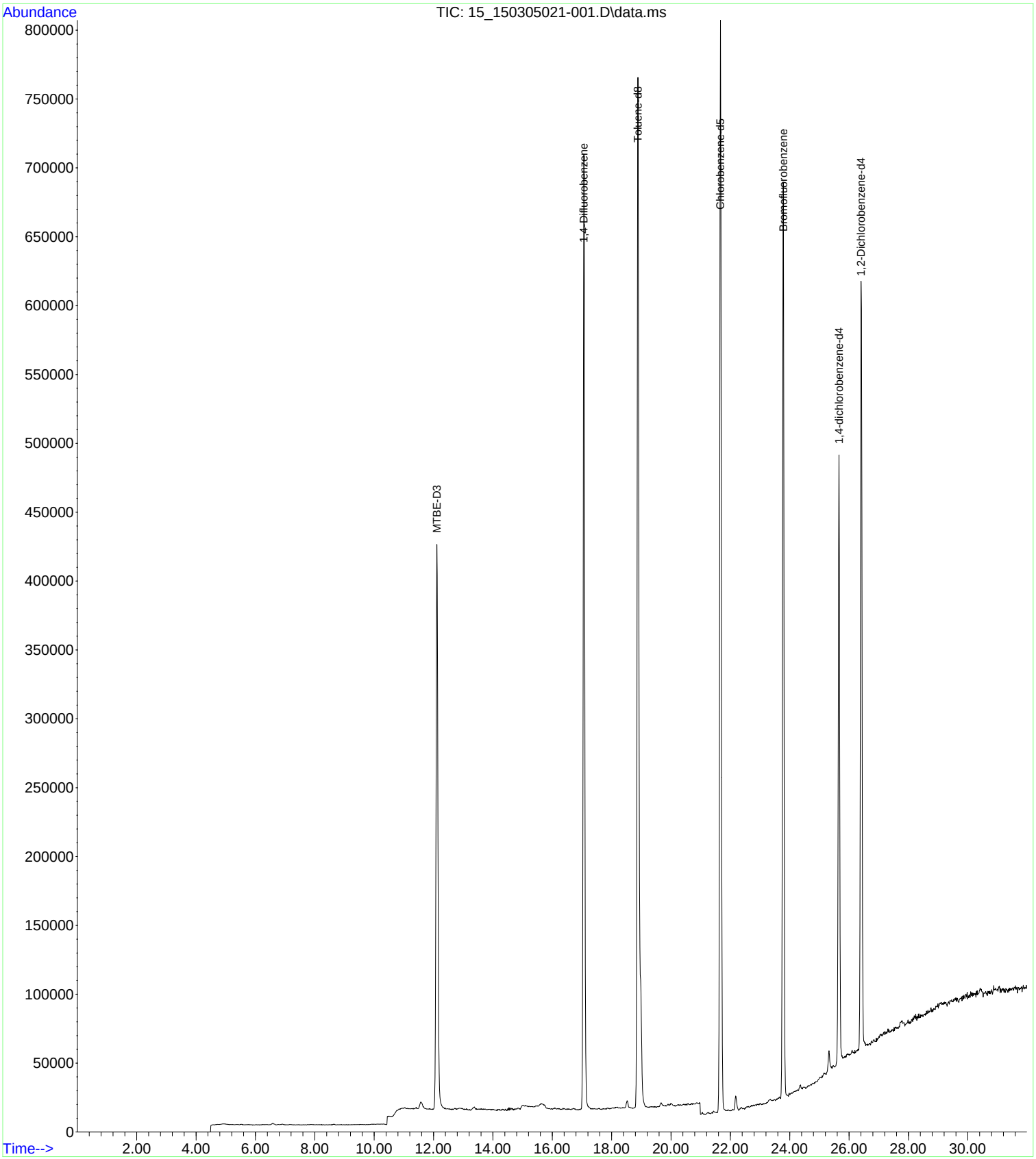
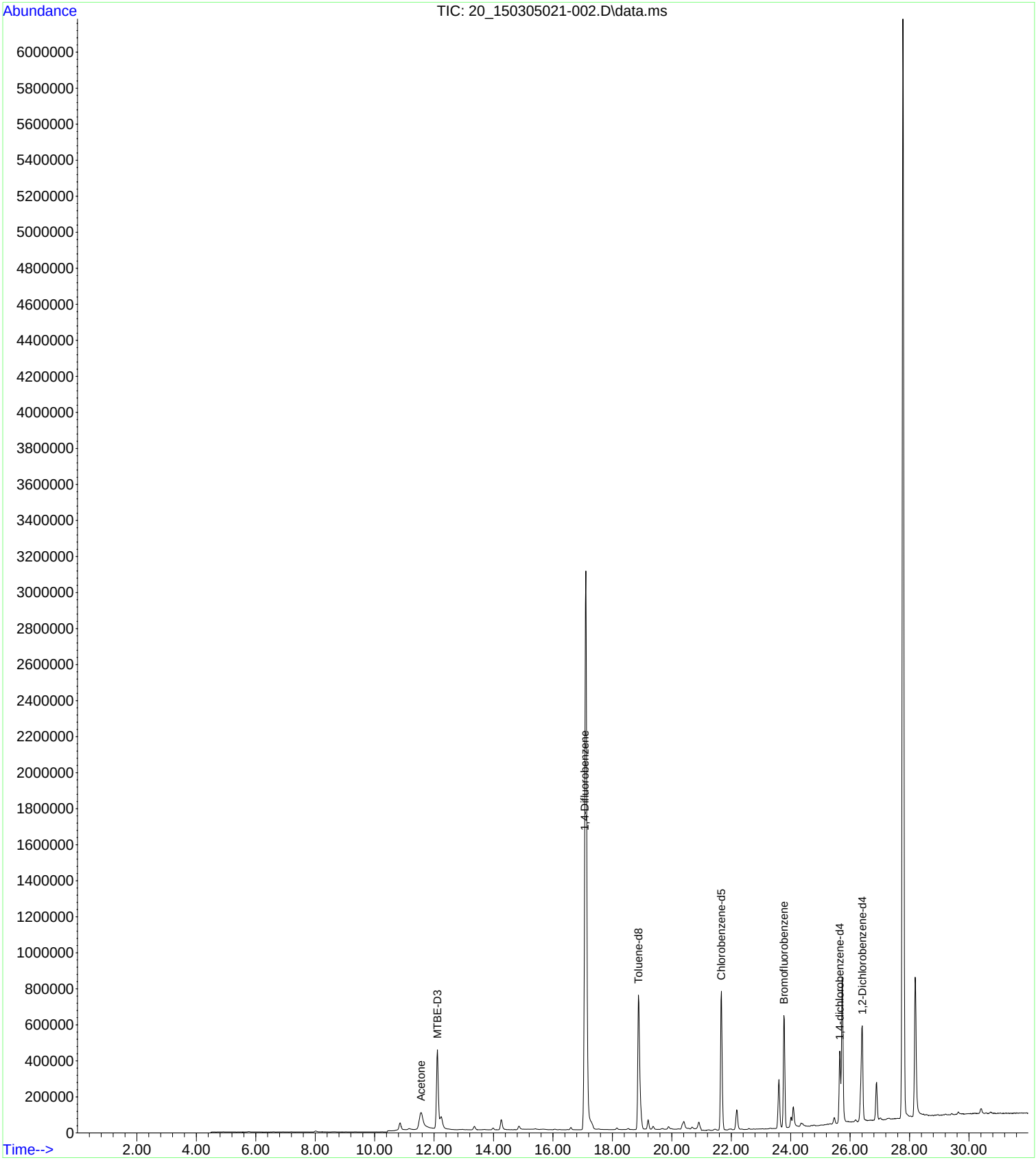
Instrument : Saturn 2100
Sample Name: 08 150303045-003
Misc Info :
Vial Number: 0



```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAR\06\15_150305021-001.D
Operator    : SAT
Acquired    : 06 Mar 15  18:01 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 15 150305021-001
Misc Info  :
Vial Number: 0
```



```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAR\06\20_150305021-002.D
Operator    : SAT
Acquired    : 06 Mar 15  21:19 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 20 150305021-002
Misc Info  :
Vial Number: 0
```



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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-001	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015 11:00 AM
Client Sample ID	NSH-023-030315	**Sampling Time**	3:00 PM	**Extraction Date**	03/05/15
Matrix	Water	**Sample Location**	W5C0031-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Sample Number	150305021-001	**Sampling Date**	3/3/2015	**Date/Time Received**	3/5/2015	11:00 AM
Client Sample ID	NSH-023-030315	**Sampling Time**	3:00 PM	**Extraction Date**	03/05/15	
Matrix	Water	**Sample Location**	W5C0031-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150305021-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	96.5	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.73	ug/L	5	94.6	62-139	3/5/2015	3/6/2015
Acenaphthene	3.90	ug/L	5	78.0	70-135	3/5/2015	3/6/2015
Acenaphthylene	3.69	ug/L	5	73.8	71-121	3/5/2015	3/6/2015
Anthracene	4.12	ug/L	5	82.4	63-113	3/5/2015	3/6/2015
Benzo(ghi)perylene	4.17	ug/L	5	83.4	76-161	3/5/2015	3/6/2015
Benzo[a]anthracene	4.13	ug/L	5	82.6	79-142	3/5/2015	3/6/2015
Benzo[a]pyrene	4.22	ug/L	5	84.4	71-163	3/5/2015	3/6/2015
2-Methylnaphthalene	4.24	ug/L	5	84.8	56-128	3/5/2015	3/6/2015
Benzo[k]fluoranthene	4.29	ug/L	5	85.8	69-169	3/5/2015	3/6/2015
Pyrene	4.26	ug/L	5	85.2	80-119	3/5/2015	3/6/2015
Dibenz[a,h]anthracene	4.15	ug/L	5	83.0	75-158	3/5/2015	3/6/2015
Fluoranthene	4.30	ug/L	5	86.0	74-120	3/5/2015	3/6/2015
Fluorene	3.92	ug/L	5	78.4	60-116	3/5/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.08	ug/L	5	81.6	72-160	3/5/2015	3/6/2015
Naphthalene	3.57	ug/L	5	71.4	51-122	3/5/2015	3/6/2015
Phenanthrene	3.87	ug/L	5	77.4	77-126	3/5/2015	3/6/2015
Benzo[b]fluoranthene	4.39	ug/L	5	87.8	69-168	3/5/2015	3/6/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.79	ug/L	5	95.8	1.3	0-50	3/5/2015	3/6/2015
Acenaphthene	4.12	ug/L	5	82.4	5.5	0-50	3/5/2015	3/6/2015
Acenaphthylene	3.92	ug/L	5	78.4	6.0	0-50	3/5/2015	3/6/2015
Anthracene	4.31	ug/L	5	86.2	4.5	0-50	3/5/2015	3/6/2015
Benzo(ghi)perylene	4.26	ug/L	5	85.2	2.1	0-50	3/5/2015	3/6/2015
Benzo[a]anthracene	4.22	ug/L	5	84.4	2.2	0-50	3/5/2015	3/6/2015
Benzo[a]pyrene	4.38	ug/L	5	87.6	3.7	0-50	3/5/2015	3/6/2015
2-Methylnaphthalene	4.63	ug/L	5	92.6	8.8	0-50	3/5/2015	3/6/2015
Benzo[k]fluoranthene	4.43	ug/L	5	88.6	3.2	0-50	3/5/2015	3/6/2015
Pyrene	4.45	ug/L	5	89.0	4.4	0-50	3/5/2015	3/6/2015
Dibenz[a,h]anthracene	4.37	ug/L	5	87.4	5.2	0-50	3/5/2015	3/6/2015
Fluoranthene	4.56	ug/L	5	91.2	5.9	0-50	3/5/2015	3/6/2015
Fluorene	4.16	ug/L	5	83.2	5.9	0-50	3/5/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	4.27	ug/L	5	85.4	4.6	0-50	3/5/2015	3/6/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150305021
Project Name: SVL #W5C0031

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.90	ug/L	5	78.0	8.8	0-50	3/5/2015	3/6/2015
Phenanthrene	4.10	ug/L	5	82.0	5.8	0-50	3/5/2015	3/6/2015
Benzo[b]fluoranthene	4.43	ug/L	5	88.6	0.9	0-50	3/5/2015	3/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/5/2015	3/6/2015
Acenaphthene	ND	ug/L	0.01	3/5/2015	3/6/2015
Acenaphthylene	ND	ug/L	0.01	3/5/2015	3/6/2015
Anthracene	ND	ug/L	0.01	3/5/2015	3/6/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/5/2015	3/6/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/5/2015	3/6/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/5/2015	3/6/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/5/2015	3/6/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/5/2015	3/6/2015
Chrysene	ND	ug/L	0.01	3/5/2015	3/6/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/5/2015	3/6/2015
Fluoranthene	ND	ug/L	0.01	3/5/2015	3/6/2015
Fluorene	ND	ug/L	0.01	3/5/2015	3/6/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/5/2015	3/6/2015
Naphthalene	ND	ug/L	0.01	3/5/2015	3/6/2015
Phenanthrene	ND	ug/L	0.01	3/5/2015	3/6/2015
Pyrene	ND	ug/L	0.01	3/5/2015	3/6/2015

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150305021
Order Date: 3/5/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5C0031
Comment:

Sample #: 150305021-001 **Customer Sample #:** NSH-023-030315

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/3/2015
Quantity: 4 **Date Received:** 3/5/2015 11:00:00 AM **Time Collected:** 3:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/17/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/17/2015	***Normal (~10 Days)***

Sample #: 150305021-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/3/2015
Quantity: 1 **Date Received:** 3/5/2015 11:00:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	3/17/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.0
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

WSC0031

FOR SVL USE ONLY
SVL JOB.#

1.8
TEMP on Receipt:

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY AND ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E. VAN BUREN ST
SUITE 545, PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number: –
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N. 44TH ST.
SUITE 300, PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7=Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: R. C. Gunn

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZN AC	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-023-030315	3/3/15	1500	CG	Z	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		METALS & SILICA SAMPLE WAS FIELD FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE WITH HNO_3.
2																									
3	TRIP BLANK																					X			
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Relinquished by: R. C. Gunn	Date: 3/3/15	Time: 1600	Received by:	Date: 3-4-15	Time: 10:00
Relinquished by: A. Jacobson	Date: 3-4-15	Time: 1234	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-023-030315	W5C0031-01	Ground Water	03-Mar-15 15:00	CG	04-Mar-2015	
TRIP BLANK	W5C0031-02	Ground Water	03-Mar-15 00:00	CG	04-Mar-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Client Sample ID: **NSH-023-030315**
SVL Sample ID: **W5C0031-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 03-Mar-15 15:00
Received: 04-Mar-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.04		W510121	AS	03/05/15 16:10	
EPA 200.7	**Calcium**	33.2	mg/L	0.040	0.029		W510121	AS	03/05/15 16:10	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.026		W510121	AS	03/05/15 16:10	
EPA 200.7	**Magnesium**	16.5	mg/L	0.20	0.11		W510121	AS	03/05/15 16:10	
EPA 200.7	**Potassium**	2.20	mg/L	0.50	0.17		W510121	AS	03/05/15 16:10	
EPA 200.7	**Silica (SiO2)**	45.2	mg/L	0.17	0.12		W510121	AS	03/05/15 16:10	
EPA 200.7	**Sodium**	24.4	mg/L	0.50	0.05		W510121	AS	03/05/15 16:10	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00019		W510031	KWH	03/11/15 08:45	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00027		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Barium**	0.0113	mg/L	0.00100	0.000099		W510031	KWH	03/11/15 08:45	
EPA 200.8	Beryllium	< 0.00020	mg/L	0.00020	0.000048		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Boron**	0.0603	mg/L	0.0050	0.0012		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Cadmium**	0.00030	mg/L	0.00020	0.000072		W510031	KWH	03/11/15 08:45	
EPA 200.8	Chromium	< 0.0015	mg/L	0.0015	0.0004		W510031	KWH	03/11/15 08:45	
EPA 200.8	Cobalt	< 0.00100	mg/L	0.00100	0.000054		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Copper**	0.00447	mg/L	0.00100	0.00015		W510031	KWH	03/11/15 08:45	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.000031		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Manganese**	0.0285	mg/L	0.00100	0.000025		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Molybdenum**	0.391	mg/L	0.00100	0.00009		W510031	KWH	03/11/15 08:45	
EPA 200.8	Nickel	< 0.0010	mg/L	0.0010	0.0004		W510031	KWH	03/11/15 08:45	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0006		W510031	KWH	03/11/15 08:45	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000021		W510031	KWH	03/11/15 08:45	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.000026		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Uranium**	0.00256	mg/L	0.00100	0.000014		W510031	KWH	03/11/15 08:45	
EPA 200.8	Vanadium	< 0.0030	mg/L	0.0030	0.0009		W510031	KWH	03/11/15 08:45	
EPA 200.8	**Zinc**	1.19	mg/L	0.0050	0.0010		W510031	KWH	03/11/15 08:45	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.00004		W510130	STA	03/10/15 13:25	
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	146	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 10:16	
SM 2320B	**Bicarbonate**	146	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 10:16	
SM 2320B	Carbonate	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 10:16	
SM 2320B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			W510041	DKS	03/05/15 10:16	
SM 2510 B	**Specific conductance**	384	µmhos/cm	5.00			W510149	RS	03/05/15 07:20	
SM 2540 C	**Total Diss. Solids**	249	mg/L	10			W510111	RS	03/05/15 13:20	
SM 4500 H B	**pH @17.0°C**	8.03	pH Units				W510041	DKS	03/05/15 10:16	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0025		W511013	VRH	03/10/15 10:49	
SM 4500-P-E	Orthophosphate as P	< 0.010	mg/L	0.010	0.004		W510115	MCB	03/04/15 14:38	
SM 4500-S-F	Sulfide	< 1.00	mg/L	1.00	0.27		W510174	SM	03/05/15 15:21	
SM 5310B	Total Organic Carbon	< 1.00	mg/L	1.00	0.24		W511163	SM	03/12/15 15:41	

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AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Client Sample ID: **NSH-023-030315**
SVL Sample ID: **W5C0031-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 03-Mar-15 15:00
Received: 04-Mar-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	17.9	mg/L	5.00	1.40	25	W510104	JMW	03/04/15 15:05	D2,M3
EPA 300.0	**Fluoride**	3.89	mg/L	0.100	0.022		W510104	JMW	03/04/15 14:53	
EPA 300.0	**Nitrate as N**	0.507	mg/L	0.050	0.008		W510104	JMW	03/04/15 14:53	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.014		W510104	JMW	03/04/15 14:53	
EPA 300.0	**Sulfate as SO4**	20.9	mg/L	0.30	0.05		W510104	JMW	03/04/15 14:53	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.18 meq/L Anion Sum: 4.10 meq/L C/A Balance: 0.90 % Calculated TDS: 254 TDS/cTDS: 0.98 TDS/eC: 0.65

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.08	0.04	0.08	W510121	05-Mar-15	
EPA 200.7	Calcium	mg/L	<0.040	0.029	0.040	W510121	05-Mar-15	
EPA 200.7	Iron	mg/L	<0.060	0.026	0.060	W510121	05-Mar-15	
EPA 200.7	Magnesium	mg/L	<0.20	0.11	0.20	W510121	05-Mar-15	
EPA 200.7	Potassium	mg/L	<0.50	0.17	0.50	W510121	05-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	<0.17	0.12	0.17	W510121	05-Mar-15	
EPA 200.7	Sodium	mg/L	<0.50	0.05	0.50	W510121	05-Mar-15	
EPA 200.8	Antimony	mg/L	<0.00300	0.00019	0.00300	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	<0.00300	0.00027	0.00300	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	<0.00100	0.000099	0.00100	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	<0.00020	0.000048	0.00020	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	<0.0050	0.0012	0.0050	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	<0.00020	0.000072	0.00020	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	<0.0015	0.0004	0.0015	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	<0.00100	0.000054	0.00100	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	<0.00100	0.00015	0.00100	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	<0.00300	0.000031	0.00300	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	<0.00100	0.000025	0.00100	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	<0.00100	0.00009	0.00100	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	<0.0010	0.0004	0.0010	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	<0.0030	0.0006	0.0030	W510031	11-Mar-15	
EPA 200.8	Silver	mg/L	<0.000100	0.000021	0.000100	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	<0.00100	0.000026	0.00100	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	<0.00100	0.000014	0.00100	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	<0.0030	0.0009	0.0030	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	<0.0050	0.0010	0.0050	W510031	11-Mar-15	
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00020	0.00004	0.00020	W510130	10-Mar-15	
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2320B	Hydroxide	mg/L as CaCO3	<1.0		1.0	W510041	05-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W510111	05-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0025	0.0100	W511013	10-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	<0.010	0.004	0.010	W510115	04-Mar-15	
SM 4500-S-F	Sulfide	mg/L	<1.00	0.27	1.00	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	<1.00	0.24	1.00	W511163	12-Mar-15	
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.20	0.06	0.20	W510104	04-Mar-15	
EPA 300.0	Fluoride	mg/L	<0.100	0.022	0.100	W510104	04-Mar-15	
EPA 300.0	Nitrate as N	mg/L	<0.050	0.008	0.050	W510104	04-Mar-15	
EPA 300.0	Nitrite as N	mg/L	<0.050	0.014	0.050	W510104	04-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	<0.30	0.05	0.30	W510104	04-Mar-15	

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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.00	1.00	100	85 - 115	W510121	05-Mar-15	
EPA 200.7	Calcium	mg/L	19.6	20.0	98.0	85 - 115	W510121	05-Mar-15	
EPA 200.7	Iron	mg/L	9.86	10.0	98.6	85 - 115	W510121	05-Mar-15	
EPA 200.7	Magnesium	mg/L	19.4	20.0	96.9	85 - 115	W510121	05-Mar-15	
EPA 200.7	Potassium	mg/L	20.1	20.0	100	85 - 115	W510121	05-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	10.3	10.7	96.7	85 - 115	W510121	05-Mar-15	
EPA 200.7	Sodium	mg/L	18.4	19.0	97.1	85 - 115	W510121	05-Mar-15	
EPA 200.8	Antimony	mg/L	0.0248	0.0250	99.3	85 - 115	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0267	0.0250	107	85 - 115	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0254	0.0250	102	85 - 115	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0259	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0257	0.0250	103	85 - 115	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0253	0.0250	101	85 - 115	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0261	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0257	0.0250	103	85 - 115	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0262	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0250	0.0250	100	85 - 115	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0261	0.0250	104	85 - 115	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0249	0.0250	99.5	85 - 115	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0282	0.0250	113	85 - 115	W510031	11-Mar-15	
EPA 200.8	Silver	mg/L	0.0267	0.0250	107	85 - 115	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0250	100	85 - 115	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0252	0.0250	101	85 - 115	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0263	0.0250	105	85 - 115	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.0273	0.0250	109	85 - 115	W510031	11-Mar-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00512	0.00500	102	85 - 115	W510130	10-Mar-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.8	99.3	97.5	85 - 115	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.8	99.3	97.5	85 - 115	W510041	05-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	301	306	98.4	90 - 110	W510149	05-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W511013	10-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.814	0.786	104	90 - 110	W510115	04-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.62	2.50	105	80 - 120	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	34.7	34.3	101	90 - 110	W511163	12-Mar-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.86	3.00	95.4	90 - 110	W510104	04-Mar-15	
EPA 300.0	Fluoride	mg/L	1.94	2.00	97.2	90 - 110	W510104	04-Mar-15	
EPA 300.0	Nitrate as N	mg/L	1.94	2.00	96.9	90 - 110	W510104	04-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.55	2.50	102	90 - 110	W510104	04-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	9.93	10.0	99.3	90 - 110	W510104	04-Mar-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	189	188	0.6	20	W510041	05-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	189	188	0.6	20	W510041	05-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	<1.0	<1.0	UDL	20	W510041	05-Mar-15	
SM 2320B	Hydroxide	mg/L as CaCO3	<1.0	<1.0	UDL	20	W510041	05-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	385	384	0.5	20	W510149	05-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	671	668	0.4	10	W510111	05-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	813	818	0.6	10	W510111	05-Mar-15	
SM 4500 H B	pH	pH Units	7.75	7.79	0.5	20	W510041	05-Mar-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.06	<0.08	1.00	106	70 - 130	W510121	05-Mar-15	
EPA 200.7	Calcium	mg/L	243	227	20.0	79.5	70 - 130	W510121	05-Mar-15	M3
EPA 200.7	Iron	mg/L	9.47	<0.060	10.0	94.4	70 - 130	W510121	05-Mar-15	
EPA 200.7	Magnesium	mg/L	43.6	24.9	20.0	93.6	70 - 130	W510121	05-Mar-15	
EPA 200.7	Potassium	mg/L	21.3	1.09	20.0	101	70 - 130	W510121	05-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	25.8	15.1	10.7	100	70 - 130	W510121	05-Mar-15	
EPA 200.7	Sodium	mg/L	29.7	11.4	19.0	96.6	70 - 130	W510121	05-Mar-15	
EPA 200.8	Antimony	mg/L	0.0270	<0.00300	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0329	<0.00300	0.0250	128	70 - 130	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0635	0.0364	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0290	0.00021	0.0250	115	70 - 130	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0614	0.0331	0.0250	113	70 - 130	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.00020	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0286	<0.0015	0.0250	114	70 - 130	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0271	<0.00100	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0332	0.00624	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0258	<0.00300	0.0250	103	70 - 130	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0300	0.00150	0.0250	114	70 - 130	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0518	0.0248	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0270	<0.0010	0.0250	108	70 - 130	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0362	<0.0030	0.0250	141	70 - 130	W510031	11-Mar-15	M1
EPA 200.8	Silver	mg/L	0.0268	<0.000100	0.0250	107	70 - 130	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0259	<0.00100	0.0250	104	70 - 130	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0322	0.00490	0.0250	109	70 - 130	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0314	<0.0030	0.0250	117	70 - 130	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.915	0.854	0.0250	R > 4S	70 - 130	W510031	11-Mar-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00103	<0.00020	0.00100	103	70 - 130	W510130	10-Mar-15	
EPA 245.1	Mercury	mg/L	0.00102	<0.00020	0.00100	102	70 - 130	W510130	10-Mar-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.181	0.0770	0.100	104	75 - 125	W511013	10-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.493	<0.010	0.500	98.6	75 - 125	W510115	04-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.42	<1.00	2.50	96.8	80 - 120	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	188	140	50.0	95.2	80 - 120	W511163	12-Mar-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	20.6	17.9	3.00	90.3	90 - 110	W510104	04-Mar-15	D2,M3
EPA 300.0	Chloride	mg/L	8.11	4.89	3.00	107	90 - 110	W510104	05-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Fluoride	mg/L	5.96	3.89	2.00	103	90 - 110	W510104	04-Mar-15	
EPA 300.0	Fluoride	mg/L	2.11	<0.100	2.00	104	90 - 110	W510104	05-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.58	0.507	2.00	104	90 - 110	W510104	04-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.17	0.060	2.00	106	90 - 110	W510104	05-Mar-15	
EPA 300.0	Nitrite as N	mg/L	1.95	<0.050	2.00	97.6	90 - 110	W510104	04-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.31	<0.050	2.00	115	90 - 110	W510104	05-Mar-15	M1
EPA 300.0	Sulfate as SO4	mg/L	31.6	20.9	10.0	107	90 - 110	W510104	04-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	13.3	2.62	10.0	107	90 - 110	W510104	05-Mar-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.07	1.06	1.00	107	0.8	20	W510121	05-Mar-15	
EPA 200.7	Calcium	mg/L	247	243	20.0	98.9	1.6	20	W510121	05-Mar-15	M3
EPA 200.7	Iron	mg/L	9.98	9.47	10.0	99.5	5.2	20	W510121	05-Mar-15	
EPA 200.7	Magnesium	mg/L	44.8	43.6	20.0	99.7	2.8	20	W510121	05-Mar-15	
EPA 200.7	Potassium	mg/L	22.3	21.3	20.0	106	4.7	20	W510121	05-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	26.0	25.8	10.7	102	0.9	20	W510121	05-Mar-15	
EPA 200.7	Sodium	mg/L	30.8	29.7	19.0	102	3.5	20	W510121	05-Mar-15	
EPA 200.8	Antimony	mg/L	0.0266	0.0270	0.0250	107	1.2	20	W510031	11-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0319	0.0329	0.0250	124	3.0	20	W510031	11-Mar-15	
EPA 200.8	Barium	mg/L	0.0626	0.0635	0.0250	105	1.4	20	W510031	11-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0290	0.0290	0.0250	115	0.0	20	W510031	11-Mar-15	
EPA 200.8	Boron	mg/L	0.0617	0.0614	0.0250	115	0.6	20	W510031	11-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0264	0.0269	0.0250	106	1.9	20	W510031	11-Mar-15	
EPA 200.8	Chromium	mg/L	0.0275	0.0286	0.0250	110	3.9	20	W510031	11-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0263	0.0271	0.0250	105	3.2	20	W510031	11-Mar-15	
EPA 200.8	Copper	mg/L	0.0320	0.0332	0.0250	103	3.5	20	W510031	11-Mar-15	
EPA 200.8	Lead	mg/L	0.0253	0.0258	0.0250	101	1.8	20	W510031	11-Mar-15	
EPA 200.8	Manganese	mg/L	0.0286	0.0300	0.0250	108	5.0	20	W510031	11-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0505	0.0518	0.0250	103	2.5	20	W510031	11-Mar-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0270	0.0250	103	4.4	20	W510031	11-Mar-15	
EPA 200.8	Selenium	mg/L	0.0357	0.0362	0.0250	138	1.6	20	W510031	11-Mar-15	M1
EPA 200.8	Silver	mg/L	0.0265	0.0268	0.0250	106	1.1	20	W510031	11-Mar-15	
EPA 200.8	Thallium	mg/L	0.0255	0.0259	0.0250	102	1.6	20	W510031	11-Mar-15	
EPA 200.8	Uranium	mg/L	0.0314	0.0322	0.0250	106	2.5	20	W510031	11-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0304	0.0314	0.0250	113	3.3	20	W510031	11-Mar-15	
EPA 200.8	Zinc	mg/L	0.894	0.915	0.0250	R > 4S	2.3	20	W510031	11-Mar-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00104	0.00103	0.00100	104	1.0	20	W510130	10-Mar-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.179	0.181	0.100	102	1.1	20	W511013	10-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.499	0.493	0.500	99.9	1.3	20	W510115	04-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.30	2.42	2.50	91.9	5.1	20	W510174	05-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	185	188	50.0	90.4	1.3	20	W511163	12-Mar-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	8.08	8.11	3.00	106	0.4	20	W510104	05-Mar-15	
EPA 300.0	Fluoride	mg/L	2.10	2.11	2.00	104	0.6	20	W510104	05-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0031**
Reported: 16-Mar-15 09:14

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)											
EPA 300.0	Nitrate as N	mg/L	2.14	2.17	2.00	104	1.6	20	W510104	05-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.29	2.31	2.00	114	0.9	20	W510104	05-Mar-15	M1
EPA 300.0	Sulfate as SO4	mg/L	13.3	13.3	10.0	107	0.2	20	W510104	05-Mar-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-001	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	NSH-009-031215	**Sampling Time**	2:20 PM		
Matrix	Water	**Sample Location**	W5C0219-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/20/2015	TGT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-001	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	NSH-009-031215	**Sampling Time**	2:20 PM		
Matrix	Water	**Sample Location**	W5C0219-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-001	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	NSH-009-031215	**Sampling Time**	2:20 PM		
Matrix	Water	**Sample Location**	W5C0219-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Toluene	3.93	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Surrogate Data

Sample Number 150318003-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.4	70-130
Bromofluorobenzene	EPA 524.3	96.4	70-130
Toluene-d8	EPA 524.3	96.8	70-130

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Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-002	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0219-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/20/2015	TGT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-002	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0219-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-002	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015	11:26 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5C0219-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Surrogate Data

Sample Number 150318003-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.8	70-130
Bromofluorobenzene	EPA 524.3	94.6	70-130
Toluene-d8	EPA 524.3	95.2	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	5.35	ug/L	5	107.0	70-130	3/20/2015	3/20/2015
Toluene	5.30	ug/L	5	106.0	70-130	3/20/2015	3/20/2015
Tetrachloroethene	5.83	ug/L	5	116.6	70-130	3/20/2015	3/20/2015
o-Xylene	4.91	ug/L	5	98.2	70-130	3/20/2015	3/20/2015
Ethylbenzene	5.02	ug/L	5	100.4	70-130	3/20/2015	3/20/2015
Chlorobenzene	5.14	ug/L	5	102.8	70-130	3/20/2015	3/20/2015
Benzene	5.24	ug/L	5	104.8	70-130	3/20/2015	3/20/2015
1,1-Dichloroethene	5.33	ug/L	5	106.6	70-130	3/20/2015	3/20/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150318003-001	Trichloroethene	ND	9.60	ug/L	10	96.0	64-147	3/20/2015	3/20/2015
150318003-001	Toluene	3.93	11.8	ug/L	10	78.7	71-142	3/20/2015	3/20/2015
150318003-001	Tetrachloroethene	ND	8.69	ug/L	10	86.9	57-150	3/20/2015	3/20/2015
150318003-001	o-Xylene	ND	9.84	ug/L	10	98.4	74-136	3/20/2015	3/20/2015
150318003-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-135	3/20/2015	3/20/2015
150318003-001	Chlorobenzene	ND	9.88	ug/L	10	98.8	71-129	3/20/2015	3/20/2015
150318003-001	Benzene	ND	10.5	ug/L	10	105.0	72-139	3/20/2015	3/20/2015
150318003-001	1,1-Dichloroethene	ND	10.4	ug/L	10	104.0	54-160	3/20/2015	3/20/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.41	ug/L	10	94.1	2.0	0-25	3/20/2015	3/20/2015
Toluene	11.8	ug/L	10	78.7	0.0	0-25	3/20/2015	3/20/2015
Tetrachloroethene	8.55	ug/L	10	85.5	1.6	0-25	3/20/2015	3/20/2015
o-Xylene	9.80	ug/L	10	98.0	0.4	0-25	3/20/2015	3/20/2015
Ethylbenzene	9.96	ug/L	10	99.6	2.4	0-25	3/20/2015	3/20/2015
Chlorobenzene	9.53	ug/L	10	95.3	3.6	0-25	3/20/2015	3/20/2015
Benzene	10.4	ug/L	10	104.0	1.0	0-25	3/20/2015	3/20/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	1.0	0-25	3/20/2015	3/20/2015

Comments:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
2-Butanone	ND	ug/L	0.5	3/20/2015	3/20/2015
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
Acetone	ND	ug/L	2.5	3/20/2015	3/20/2015
Acrylonitrile	ND	ug/L	0.5	3/20/2015	3/20/2015
Benzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromochloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromoform	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Carbon disulfide	ND	ug/L	0.5	3/20/2015	3/20/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	3/20/2015
Chlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Chloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Chloroform	ND	ug/L	0.5	3/20/2015	3/20/2015

Comments:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Chloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Dibromomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Diethyl ether	ND	ug/L	0.5	3/20/2015	3/20/2015
Ethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	3/20/2015
Iodomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
m+p-Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
Methylene chloride	ND	ug/L	0.5	3/20/2015	3/20/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	3/20/2015
Naphthalene	ND	ug/L	0.5	3/20/2015	3/20/2015
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
o-Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Styrene	ND	ug/L	0.5	3/20/2015	3/20/2015
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
Toluene	ND	ug/L	0.5	3/20/2015	3/20/2015
Total Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	3/20/2015
Trichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	3/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Sample Number	150318003-001	**Sampling Date**	3/12/2015	**Date/Time Received**	3/17/2015 11:26 AM
Client Sample ID	NSH-009-031215	**Sampling Time**	2:20 PM	**Extraction Date**	3/19/15
Matrix	Water	**Sample Location**	W5C0219-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150318003-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	94.8	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.39	ug/L	5	87.8	62-139	3/19/2015	3/20/2015
Acenaphthene	4.21	ug/L	5	84.2	70-135	3/19/2015	3/20/2015
Acenaphthylene	4.26	ug/L	5	85.2	71-121	3/19/2015	3/20/2015
Anthracene	4.25	ug/L	5	85.0	63-113	3/19/2015	3/20/2015
Benzo(ghi)perylene	4.34	ug/L	5	86.8	76-161	3/19/2015	3/20/2015
Benzo[a]anthracene	4.73	ug/L	5	94.6	79-142	3/19/2015	3/20/2015
Benzo[a]pyrene	4.31	ug/L	5	86.2	71-163	3/19/2015	3/20/2015
2-Methylnaphthalene	4.76	ug/L	5	95.2	56-128	3/19/2015	3/20/2015
Benzo[k]fluoranthene	4.20	ug/L	5	84.0	69-169	3/19/2015	3/20/2015
Pyrene	4.19	ug/L	5	83.8	80-119	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	4.37	ug/L	5	87.4	75-158	3/19/2015	3/20/2015
Fluoranthene	4.24	ug/L	5	84.8	74-120	3/19/2015	3/20/2015
Fluorene	4.39	ug/L	5	87.8	60-116	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	4.32	ug/L	5	86.4	72-160	3/19/2015	3/20/2015
Naphthalene	4.22	ug/L	5	84.4	51-122	3/19/2015	3/20/2015
Phenanthrene	4.24	ug/L	5	84.8	77-126	3/19/2015	3/20/2015
Benzo[b]fluoranthene	4.60	ug/L	5	92.0	69-168	3/19/2015	3/20/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.36	ug/L	5	87.2	0.7	0-50	3/19/2015	3/20/2015
Acenaphthene	4.21	ug/L	5	84.2	0.0	0-50	3/19/2015	3/20/2015
Acenaphthylene	4.20	ug/L	5	84.0	1.4	0-50	3/19/2015	3/20/2015
Anthracene	4.29	ug/L	5	85.8	0.9	0-50	3/19/2015	3/20/2015
Benzo(ghi)perylene	4.38	ug/L	5	87.6	0.9	0-50	3/19/2015	3/20/2015
Benzo[a]anthracene	4.74	ug/L	5	94.8	0.2	0-50	3/19/2015	3/20/2015
Benzo[a]pyrene	4.30	ug/L	5	86.0	0.2	0-50	3/19/2015	3/20/2015
2-Methylnaphthalene	4.73	ug/L	5	94.6	0.6	0-50	3/19/2015	3/20/2015
Benzo[k]fluoranthene	4.21	ug/L	5	84.2	0.2	0-50	3/19/2015	3/20/2015
Pyrene	4.26	ug/L	5	85.2	1.7	0-50	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	4.45	ug/L	5	89.0	1.8	0-50	3/19/2015	3/20/2015
Fluoranthene	4.29	ug/L	5	85.8	1.2	0-50	3/19/2015	3/20/2015
Fluorene	4.34	ug/L	5	86.8	1.1	0-50	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	4.25	ug/L	5	85.0	1.6	0-50	3/19/2015	3/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318003
Project Name: SVL #W5C0219

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.24	ug/L	5	84.8	0.5	0-50	3/19/2015	3/20/2015
Phenanthrene	4.28	ug/L	5	85.6	0.9	0-50	3/19/2015	3/20/2015
Benzo[b]fluoranthene	4.53	ug/L	5	90.6	1.5	0-50	3/19/2015	3/20/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/19/2015	3/20/2015
Acenaphthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Acenaphthylene	ND	ug/L	0.01	3/19/2015	3/20/2015
Anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Chrysene	ND	ug/L	0.01	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Fluorene	ND	ug/L	0.01	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Naphthalene	ND	ug/L	0.01	3/19/2015	3/20/2015
Phenanthrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150318003
Order Date: 3/18/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5C0219
Comment:

Sample #: 150318003-001 **Customer Sample #:** NSH-009-031215

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/12/2015
Quantity: 4 **Date Received:** 3/17/2015 11:26:00 AM **Time Collected:** 2:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/27/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/27/2015	***Normal (~10 Days)***

Sample #: 150318003-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/12/2015
Quantity: 1 **Date Received:** 3/17/2015 11:26:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	3/27/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	3.7
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5C0219

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.8

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley & Aldrich
Contact: Lauren Candreva
Address: 400 East Van Buren St. Suite 545 Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N. 44th St. Suite 300 Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-009-031215	3/12/15	1420	SW	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica Sample was field filtered w/ a 0.45 µm Disposable Groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									
6																									
7																									SHIPPED UPS TRACK:
8																									A310 210 625 5
9																									
10																									

Relinquished by: Gordon Nielsen	Date: 3/12/15	Time: 14:50	Received by: R. C. Gruen	Date: 3/12/15	Time: 1450
Relinquished by: Jacobson	Date: 3-16-15	Time: 1244	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-009-031215	W5C0219-01	Ground Water	12-Mar-15 14:20	SW	13-Mar-2015	
TRIP BLANK	W5C0219-02	Ground Water	12-Mar-15 00:00	SW	13-Mar-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Client Sample ID: **NSH-009-031215**
SVL Sample ID: **W5C0219-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 12-Mar-15 14:20
Received: 13-Mar-15
Sampled By: SW

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W512004	AS	03/15/15 13:37	U
EPA 200.7	**Calcium**	52.4	mg/L	0.040	0.029		W512004	AS	03/15/15 13:37	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W512004	AS	03/15/15 13:37	U
EPA 200.7	**Magnesium**	18.7	mg/L	0.20	0.11		W512004	AS	03/15/15 13:37	
EPA 200.7	**Potassium**	2.02	mg/L	0.50	0.17		W512004	AS	03/15/15 13:37	
EPA 200.7	**Silica (SiO2)**	31.3	mg/L	0.17	0.12		W512004	AS	03/15/15 13:37	
EPA 200.7	**Sodium**	26.7	mg/L	0.50	0.05		W512004	AS	03/15/15 13:37	
EPA 200.8	**Antimony**	0.00038	mg/L	0.00300	0.00019		W512019	KWH	03/17/15 12:10	J
EPA 200.8	**Arsenic**	0.00060	mg/L	0.00300	0.00027		W512019	KWH	03/17/15 12:10	J
EPA 200.8	**Barium**	0.00202	mg/L	0.00100	0.000099		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Beryllium**	0.00047	mg/L	0.00020	0.000048		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Boron**	0.0469	mg/L	0.0050	0.0012		W512019	KWH	03/17/15 12:10	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W512019	KWH	03/17/15 12:10	U
EPA 200.8	**Chromium**	0.0040	mg/L	0.0015	0.0004		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Cobalt**	0.00012	mg/L	0.00100	0.000054		W512019	KWH	03/17/15 12:10	J
EPA 200.8	**Copper**	0.00127	mg/L	0.00100	0.00015		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Lead**	0.00011	mg/L	0.00300	0.000031		W512019	KWH	03/17/15 12:10	J
EPA 200.8	**Manganese**	0.0126	mg/L	0.00100	0.000025		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Molybdenum**	0.0419	mg/L	0.00100	0.00009		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Nickel**	0.0016	mg/L	0.0010	0.0004		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Selenium**	0.0018	mg/L	0.0030	0.0006		W512019	KWH	03/17/15 12:10	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W512019	KWH	03/17/15 12:10	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W512019	KWH	03/17/15 12:10	U
EPA 200.8	**Uranium**	0.00523	mg/L	0.00100	0.000014		W512019	KWH	03/17/15 12:10	
EPA 200.8	**Vanadium**	0.0019	mg/L	0.0030	0.0009		W512019	KWH	03/17/15 12:10	J
EPA 200.8	**Zinc**	0.938	mg/L	0.0050	0.0010		W512019	KWH	03/17/15 12:10	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W513032	STA	03/24/15 13:23	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	183	mg/L as CaCO3	1.0			W511245	AGF	03/16/15 12:55	
SM 2320B	**Bicarbonate**	183	mg/L as CaCO3	1.0			W511245	AGF	03/16/15 12:55	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W511245	AGF	03/16/15 12:55	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W511245	AGF	03/16/15 12:55	U
SM 2510 B	**Specific conductance**	530	µmhos/cm	5.00			W511268	JDM	03/16/15 12:10	
SM 2540 C	**Total Diss. Solids**	315	mg/L	10			W511261	JDM	03/16/15 14:35	
SM 4500 H B	**pH @18.0°C**	7.98	pH Units				W511245	AGF	03/16/15 12:55	H5
SM 4500-CN-I	**Cyanide (WAD)**	0.0030	mg/L	0.0100	0.0025		W512250	VRH	03/20/15 10:00	J
SM 4500-P-E	Orthophosphate as P	< 0.004	mg/L	0.010	0.004		W511243	SM	03/13/15 14:16	U
SM 4500-S-F	Sulfide	< 0.27	mg/L	1.00	0.27		W512221	VRH	03/19/15 13:38	U
SM 5310B	Total Organic Carbon	< 0.24	mg/L	1.00	0.24		W512183	SM	03/19/15 20:34	U

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Client Sample ID: **NSH-009-031215**
SVL Sample ID: **W5C0219-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 12-Mar-15 14:20
Received: 13-Mar-15
Sampled By: SW

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	16.4	mg/L	2.00	0.56	10	W511236	JMW	03/17/15 13:44	D2,M3
EPA 300.0	**Fluoride**	2.81	mg/L	0.100	0.022		W511236	JMW	03/13/15 14:41	
EPA 300.0	**Nitrate as N**	1.98	mg/L	0.050	0.008		W511236	JMW	03/13/15 14:41	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W511236	JMW	03/13/15 14:41	U
EPA 300.0	**Sulfate as SO4**	59.7	mg/L	3.00	0.50	10	W511236	JMW	03/17/15 13:44	D2,M3

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.40 meq/L Anion Sum: 5.65 meq/L C/A Balance: -2.28 % Calculated TDS: 329 TDS/cTDS: 0.96 TDS/eC: 0.59

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W512004	15-Mar-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W512004	15-Mar-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W512004	15-Mar-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W512004	15-Mar-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W512004	15-Mar-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W512004	15-Mar-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W512004	15-Mar-15	U
EPA 200.8	Antimony	mg/L	0.00027	0.00019	0.00300	W512019	17-Mar-15	J
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W512019	17-Mar-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W512019	17-Mar-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W512019	17-Mar-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W512019	17-Mar-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W512019	17-Mar-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W512019	17-Mar-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W512019	17-Mar-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W512019	17-Mar-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W512019	17-Mar-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W512019	17-Mar-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W512019	17-Mar-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W512019	17-Mar-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W512019	17-Mar-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W512019	17-Mar-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W512019	17-Mar-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W512019	17-Mar-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W512019	17-Mar-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W512019	17-Mar-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W513032	24-Mar-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.82		1.0	W511245	16-Mar-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.82		1.0	W511245	16-Mar-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W511245	16-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W511245	16-Mar-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W511261	16-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0030	0.0025	0.0100	W512250	20-Mar-15	J
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W511243	13-Mar-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W512221	19-Mar-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W512183	19-Mar-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	0.07	0.06	0.20	W511236	13-Mar-15	J
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W511236	13-Mar-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W511236	13-Mar-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W511236	13-Mar-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W511236	13-Mar-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.97	1.00	97.1	85 - 115	W512004	15-Mar-15	
EPA 200.7	Calcium	mg/L	18.7	20.0	93.6	85 - 115	W512004	15-Mar-15	
EPA 200.7	Iron	mg/L	9.29	10.0	92.9	85 - 115	W512004	15-Mar-15	
EPA 200.7	Magnesium	mg/L	18.3	20.0	91.6	85 - 115	W512004	15-Mar-15	
EPA 200.7	Potassium	mg/L	19.7	20.0	98.5	85 - 115	W512004	15-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	10.2	10.7	95.7	85 - 115	W512004	15-Mar-15	
EPA 200.7	Sodium	mg/L	18.1	19.0	95.4	85 - 115	W512004	15-Mar-15	
EPA 200.8	Antimony	mg/L	0.0226	0.0250	90.5	85 - 115	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0242	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0240	0.0250	95.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0239	0.0250	95.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0246	0.0250	98.3	85 - 115	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0241	0.0250	96.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0226	0.0250	90.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0236	0.0250	94.3	85 - 115	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0241	0.0250	96.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0242	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0240	0.0250	95.9	85 - 115	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0232	0.0250	92.7	85 - 115	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0244	0.0250	97.5	85 - 115	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0250	0.0250	99.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0249	0.0250	99.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0242	0.0250	96.9	85 - 115	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0250	0.0250	99.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0241	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.0251	0.0250	100	85 - 115	W512019	17-Mar-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00498	0.00500	99.6	85 - 115	W513032	24-Mar-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.0	99.3	96.7	85 - 115	W511245	16-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.0	99.3	96.7	85 - 115	W511245	16-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	296	306	96.8	90 - 110	W511268	16-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.142	0.150	94.7	90 - 110	W512250	20-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.803	0.786	102	90 - 110	W511243	13-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.49	2.50	99.8	80 - 120	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	31.2	34.3	91.0	90 - 110	W512183	19-Mar-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.76	3.00	92.0	90 - 110	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	1.92	2.00	95.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	1.94	2.01	96.5	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.52	2.51	100	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	9.72	10.0	97.2	90 - 110	W511236	13-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	181	183	0.7	20	W511245	16-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	181	183	0.7	20	W511245	16-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W511245	16-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W511245	16-Mar-15	U
SM 2510 B	Specific conductance	µmhos/cm	520	530	2.0	20	W511268	16-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	270	262	3.0	10	W511261	16-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	391	390	0.3	10	W511261	16-Mar-15	
SM 4500 H B	pH	pH Units	7.91	7.98	0.9	20	W511245	16-Mar-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.07	<0.036	1.00	107	70 - 130	W512004	15-Mar-15	
EPA 200.7	Calcium	mg/L	335	310	20.0	121	70 - 130	W512004	15-Mar-15	M3
EPA 200.7	Iron	mg/L	9.93	<0.026	10.0	99.3	70 - 130	W512004	15-Mar-15	
EPA 200.7	Magnesium	mg/L	485	454	20.0	R > 4S	70 - 130	W512004	15-Mar-15	M3
EPA 200.7	Potassium	mg/L	28.1	4.65	20.0	117	70 - 130	W512004	15-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	19.9	8.49	10.7	106	70 - 130	W512004	15-Mar-15	
EPA 200.7	Sodium	mg/L	217	195	19.0	117	70 - 130	W512004	15-Mar-15	M3
EPA 200.8	Antimony	mg/L	0.0246	0.00038	0.0250	96.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0296	0.00060	0.0250	116	70 - 130	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0267	0.00202	0.0250	98.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0242	0.00047	0.0250	94.8	70 - 130	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0684	0.0469	0.0250	86.1	70 - 130	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0250	<0.000072	0.0250	100	70 - 130	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0278	0.0040	0.0250	94.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0238	0.00012	0.0250	94.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0243	0.00127	0.0250	92.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0230	0.00011	0.0250	91.5	70 - 130	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0371	0.0126	0.0250	98.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0676	0.0419	0.0250	103	70 - 130	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0258	0.0016	0.0250	96.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0327	0.0018	0.0250	124	70 - 130	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0240	<0.000021	0.0250	96.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0232	<0.000026	0.0250	92.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0294	0.00523	0.0250	96.6	70 - 130	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0266	0.0019	0.0250	98.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.970	0.938	0.0250	126	70 - 130	W512019	17-Mar-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W513032	24-Mar-15	
EPA 245.1	Mercury	mg/L	0.00098	<0.00004	0.00100	98.0	70 - 130	W513032	24-Mar-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0920	0.0040	0.100	88.0	75 - 125	W512250	20-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.499	<0.0058	0.500	99.8	75 - 125	W511243	13-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.41	<0.27	2.50	96.6	80 - 120	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	0.99	50.0	100	80 - 120	W512183	19-Mar-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	2.99	0.24	3.00	91.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Chloride	mg/L	19.1	16.4	3.00	91.6	90 - 110	W511236	17-Mar-15	D2,M3

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Fluoride	mg/L	1.99	0.039	2.00	97.3	90 - 110	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	4.76	2.81	2.00	97.5	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	1.98	<0.008	2.00	98.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	4.03	1.98	2.00	103	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.08	<0.014	2.00	104	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.05	<0.014	2.00	103	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	14.5	4.47	10.0	101	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	69.7	59.7	10.0	100	90 - 110	W511236	17-Mar-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.11	1.07	1.00	111	3.7	20	W512004	15-Mar-15	
EPA 200.7	Calcium	mg/L	346	335	20.0	R > 4S	3.2	20	W512004	15-Mar-15	M3
EPA 200.7	Iron	mg/L	10.1	9.93	10.0	101	2.1	20	W512004	15-Mar-15	
EPA 200.7	Magnesium	mg/L	499	485	20.0	R > 4S	2.9	20	W512004	15-Mar-15	M3
EPA 200.7	Potassium	mg/L	28.4	28.1	20.0	119	1.1	20	W512004	15-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	20.4	19.9	10.7	111	2.7	20	W512004	15-Mar-15	
EPA 200.7	Sodium	mg/L	224	217	19.0	R > 4S	3.1	20	W512004	15-Mar-15	M3
EPA 200.8	Antimony	mg/L	0.0247	0.0246	0.0250	97.2	0.3	20	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0285	0.0296	0.0250	112	3.6	20	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0258	0.0267	0.0250	95.2	3.5	20	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0245	0.0242	0.0250	96.3	1.5	20	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0691	0.0684	0.0250	89.0	1.1	20	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0243	0.0250	0.0250	97.1	3.1	20	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0280	0.0278	0.0250	95.9	0.9	20	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0233	0.0238	0.0250	92.7	2.4	20	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0245	0.0243	0.0250	92.9	0.9	20	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0233	0.0230	0.0250	92.9	1.5	20	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0360	0.0371	0.0250	93.8	2.9	20	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0656	0.0676	0.0250	95.1	3.0	20	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0249	0.0258	0.0250	92.8	3.8	20	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0305	0.0327	0.0250	115	7.1	20	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0234	0.0240	0.0250	93.8	2.3	20	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0233	0.0232	0.0250	93.3	0.6	20	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0296	0.0294	0.0250	97.5	0.8	20	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0264	0.0266	0.0250	97.9	0.8	20	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.969	0.970	0.0250	124	0.1	20	W512019	17-Mar-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00100	0.00099	0.00100	100	1.0	20	W513032	24-Mar-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0930	0.0920	0.100	89.0	1.1	20	W512250	20-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.502	0.499	0.500	100	0.6	20	W511243	13-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.45	2.41	2.50	98.2	1.7	20	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	50.2	51.0	50.0	98.5	1.5	20	W512183	19-Mar-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	3.12	2.99	3.00	96.0	4.1	20	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	2.07	1.99	2.00	102	4.2	20	W511236	13-Mar-15	

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AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0219**
Reported: 23-Apr-15 15:20

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)											
EPA 300.0	Nitrate as N	mg/L	2.07	1.98	2.00	103	4.4	20	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.16	2.08	2.00	108	3.7	20	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	15.0	14.5	10.0	106	3.4	20	W511236	13-Mar-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

Thursday, April 16, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1503415
Project Name:
Project Number: 5C0258

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 3/20/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

JRK/jrk
Enclosure(s):

ALS is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Laboratory Certifications	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri	175
Nebraska	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
North Dakota (ND)	R-057
Oklahoma	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington	C1280

1503415

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met with the following exception:

Uranium-235 activity is reported in the associated method blank above the minimum detectable concentration value, as indicated with a “B3” qualifier on the final reports. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1503415
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5C0258
Client PO Number: 15155

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-019-031615	1503415-1		WATER	16-Mar-15	13:00

ALS

1503415

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5C0258

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15155

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross a/b 900.0	RAD 226/228 903.1/904	U 234/235/238	Astm D3972						Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																							
1	NSH-019-081615	3/16/15	1300	JN	2	3			X					X	X	X								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
S Jacobson	3-17-15	1200	[illegible]	03/20/15	1235
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1503415

Project Manager: JRK Initials: ECP Date: 3/20/15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 3-20-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1503415

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

DWT: 16,11,14

13
-1

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4372 4713

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

60.0A 01/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

RRD R 1114

YTICAL
) 784-1258

Client: SVL Analytical
Project: 5C0258
Sample ID: NSH-019-031615
Legal Location:
Collection Date: 3/16/2015 13:00

Date: *15-Apr-15*
Work Order: 1503415
Lab ID: 1503415-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **3/30/2015**	PrepBy: **DKL**
GROSS ALPHA	**14.5 (+/- 2.6)**		**0.9**	**pCi/l**	NA	4/1/2015 14:33
GROSS BETA	**13.4 (+/- 2.4)**		**1.7**	**pCi/l**	NA	4/1/2015 14:33
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **4/2/2015**	PrepBy: **SAM**
Tracer: U-232	*83*		*30-110*	*%REC*	DL = NA	4/8/2015 09:26
U-234	**7.7 (+/- 1.5)**		**0.1**	**pCi/l**	NA	4/8/2015 09:26
U-235	**0.42 (+/- 0.22)**		**0.18**	**pCi/l**	NA	4/8/2015 09:26
U-238	**8.4 (+/- 1.6)**		**0.1**	**pCi/l**	NA	4/8/2015 09:26
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **3/27/2015**	PrepBy: **PJW**
Ra-226	**1.61 (+/- 0.6)**		**0.36**	**pCi/l**	NA	4/3/2015 13:42
Carr: BARIUM	*92.8*		*40-110*	*%REC*	DL = NA	4/3/2015 13:42
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **3/24/2015**	PrepBy: **DKL**
Ra-228	0.61 (+/- 0.33)	LT	0.6	pCi/l	NA	3/27/2015 11:41
Carr: BARIUM	*92.8*		*40-110*	*%REC*	DL = NA	3/27/2015 11:41

Client:	SVL Analytical	**Date:**	*15-Apr-15*
Project:	5C0258	**Work Order:**	1503415
Sample ID:	NSH-019-031615	**Lab ID:**	1503415-1
Legal Location:		**Matrix:**	WATER
Collection Date:	3/16/2015 13:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1503415
Project: 5C0258

Date: *4/15/2015 4:29:*

QC BATCH REPORT

Batch ID: **RE150327-1-2** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150327-1** Units: **pCi/l** Analysis Date: **4/3/2015 14:03**
Client ID: Run ID: **RE150327-1A** Prep Date: **3/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	24.2 (+/- 6.2)	0.1	30.72		78.7	67-120					P
Carr: BARIUM	31880		33530		95.1	40-110					

LCSD Sample ID: **RE150327-1** Units: **pCi/l** Analysis Date: **4/3/2015 14:03**
Client ID: Run ID: **RE150327-1A** Prep Date: **3/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	28 (+/- 7.1)	0.2	30.72		91.1	67-120		24.2	0.4	2.1	P
Carr: BARIUM	31200		33610		92.8	40-110		31880			

MB Sample ID: **RE150327-1** Units: **pCi/l** Analysis Date: **4/3/2015 14:03**
Client ID: Run ID: **RE150327-1A** Prep Date: **3/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.22									U
Carr: BARIUM	31880		33530		95.1	40-110					

The following samples were analyzed in this batch: 1503415-1

Client: SVL Analytical
Work Order: 1503415
Project: 5C0258

QC BATCH REPORT

Batch ID: **AS150401-1-5** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150401-1** Units: **pCi/l** Analysis Date: **4/8/2015 10:39**
Client ID: Run ID: **AS150401-1U** Prep Date: **4/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.62 (+/- 0.85)	0.06	4.416		105	82-122					P
U-238	4.74 (+/- 0.87)	0.05	4.585		103	78-126					P
Tracer: U-232	3	0.08	4.171		72	30-110					

LCSD Sample ID: **AS150401-1** Units: **pCi/l** Analysis Date: **4/8/2015 10:39**
Client ID: Run ID: **AS150401-1U** Prep Date: **4/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.49 (+/- 0.8)	0.05	4.416		102	82-122		4.62	0.1	2.1	P
U-238	4.75 (+/- 0.85)	0.06	4.585		104	78-126		4.74	0.002	2.1	P
Tracer: U-232	3.4	0.08	4.171		81.5	30-110		3			

MB Sample ID: **AS150401-1** Units: **pCi/l** Analysis Date: **4/8/2015 10:39**
Client ID: Run ID: **AS150401-1U** Prep Date: **4/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.058									U
U-235	0.025 (+/- 0.025)	0.017									B3
U-238	ND	0.029									U
Tracer: U-232	3.57	0.05	4.171		85.6	30-110					

The following samples were analyzed in this batch: 1503415-1

Client: SVL Analytical
Work Order: 1503415
Project: 5C0258

QC BATCH REPORT

Batch ID: **AB150330-2-3** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150330-2** Units: **pCi/l** Analysis Date: **4/1/2015 13:22**

Client ID: Run ID: **AB150330-2A** Prep Date: **3/30/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	235 (+/- 43)	6	224.3		105	70-130					P,M3
GROSS BETA	199 (+/- 35)	12	204.4		97.5	70-130					P,M3

MB Sample ID: **AB150330-2** Units: **pCi/l** Analysis Date: **4/1/2015 14:33**

Client ID: Run ID: **AB150330-2A** Prep Date: **3/30/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.61									U
GROSS BETA	ND	1									U

The following samples were analyzed in this batch: 1503415-1

Client: SVL Analytical
Work Order: 1503415
Project: 5C0258

QC BATCH REPORT

Batch ID: **RA150324-1-2** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150324-1** Units: **pCi/l** Analysis Date: **3/27/2015 11:13**
Client ID: Run ID: **RA150324-1A** Prep Date: **3/24/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.4 (+/- 2.2)	1.1	7.916		106	70-130					P,M3
Carr: BARIUM	31880		33530		95.1	40-110					

LCSD Sample ID: **RA150324-1** Units: **pCi/l** Analysis Date: **3/27/2015 11:13**
Client ID: Run ID: **RA150324-1A** Prep Date: **3/24/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.1 (+/- 2.1)	1	7.916		102	70-130		8.4	0.08	2.1	P,M3
Carr: BARIUM	31200		33610		92.8	40-110		31880			

MB Sample ID: **RA150324-1** Units: **pCi/l** Analysis Date: **3/27/2015 11:41**
Client ID: Run ID: **RA150324-1A** Prep Date: **3/24/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.61									U
Carr: BARIUM	31880		33530		95.1	40-110					

The following samples were analyzed in this batch: 1503415-1

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-001	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	NSH-019-031615	**Sampling Time**	1:00 PM		
Matrix	Water	**Sample Location**	W5C0258-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/20/2015	TGT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-001	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	NSH-019-031615	**Sampling Time**	1:00 PM		
Matrix	Water	**Sample Location**	W5C0258-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-001	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	NSH-019-031615	**Sampling Time**	1:00 PM		
Matrix	Water	**Sample Location**	W5C0258-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Surrogate Data

Sample Number 150318006-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	94.2	70-130
Bromofluorobenzene	EPA 524.3	97.6	70-130
Toluene-d8	EPA 524.3	97.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-002	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0258-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/20/2015	TGT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-002	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0258-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-002	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015	3:30 PM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5C0258-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	TGT	EPA 524.3	

Surrogate Data

Sample Number 150318006-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.0	70-130
Bromofluorobenzene	EPA 524.3	99.0	70-130
Toluene-d8	EPA 524.3	97.4	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	5.35	ug/L	5	107.0	70-130	3/20/2015	3/20/2015
Toluene	5.30	ug/L	5	106.0	70-130	3/20/2015	3/20/2015
Tetrachloroethene	5.83	ug/L	5	116.6	70-130	3/20/2015	3/20/2015
o-Xylene	4.91	ug/L	5	98.2	70-130	3/20/2015	3/20/2015
Ethylbenzene	5.02	ug/L	5	100.4	70-130	3/20/2015	3/20/2015
Chlorobenzene	5.14	ug/L	5	102.8	70-130	3/20/2015	3/20/2015
Benzene	5.24	ug/L	5	104.8	70-130	3/20/2015	3/20/2015
1,1-Dichloroethene	5.33	ug/L	5	106.6	70-130	3/20/2015	3/20/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150318003-001	Trichloroethene	ND	9.60	ug/L	10	96.0	64-147	3/20/2015	3/20/2015
150318003-001	Toluene	3.93	11.8	ug/L	10	78.7	71-142	3/20/2015	3/20/2015
150318003-001	Tetrachloroethene	ND	8.69	ug/L	10	86.9	57-150	3/20/2015	3/20/2015
150318003-001	o-Xylene	ND	9.84	ug/L	10	98.4	74-136	3/20/2015	3/20/2015
150318003-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-135	3/20/2015	3/20/2015
150318003-001	Chlorobenzene	ND	9.88	ug/L	10	98.8	71-129	3/20/2015	3/20/2015
150318003-001	Benzene	ND	10.5	ug/L	10	105.0	72-139	3/20/2015	3/20/2015
150318003-001	1,1-Dichloroethene	ND	10.4	ug/L	10	104.0	54-160	3/20/2015	3/20/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.41	ug/L	10	94.1	2.0	0-25	3/20/2015	3/20/2015
Toluene	11.8	ug/L	10	78.7	0.0	0-25	3/20/2015	3/20/2015
Tetrachloroethene	8.55	ug/L	10	85.5	1.6	0-25	3/20/2015	3/20/2015
o-Xylene	9.80	ug/L	10	98.0	0.4	0-25	3/20/2015	3/20/2015
Ethylbenzene	9.96	ug/L	10	99.6	2.4	0-25	3/20/2015	3/20/2015
Chlorobenzene	9.53	ug/L	10	95.3	3.6	0-25	3/20/2015	3/20/2015
Benzene	10.4	ug/L	10	104.0	1.0	0-25	3/20/2015	3/20/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	1.0	0-25	3/20/2015	3/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,1-dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/20/2015	3/20/2015
2-Butanone	ND	ug/L	0.5	3/20/2015	3/20/2015
2-Chlorotoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
4-Chlorotoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
Acetone	ND	ug/L	2.5	3/20/2015	3/20/2015
Acrylonitrile	ND	ug/L	0.5	3/20/2015	3/20/2015
Benzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromochloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromodichloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromoform	ND	ug/L	0.5	3/20/2015	3/20/2015
Bromomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Carbon disulfide	ND	ug/L	0.5	3/20/2015	3/20/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/20/2015	3/20/2015
Chlorobenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Chloroethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Chloroform	ND	ug/L	0.5	3/20/2015	3/20/2015

Comments:

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Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Chloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
Dibromochloromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Dibromomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Diethyl ether	ND	ug/L	0.5	3/20/2015	3/20/2015
Ethylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Hexachlorobutadiene	ND	ug/L	0.5	3/20/2015	3/20/2015
Iodomethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Isopropylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
m+p-Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
Methylene chloride	ND	ug/L	0.5	3/20/2015	3/20/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/20/2015	3/20/2015
Naphthalene	ND	ug/L	0.5	3/20/2015	3/20/2015
n-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
n-Propylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
o-Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
p-isopropyltoluene	ND	ug/L	0.5	3/20/2015	3/20/2015
sec-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Styrene	ND	ug/L	0.5	3/20/2015	3/20/2015
tert-Butylbenzene	ND	ug/L	0.5	3/20/2015	3/20/2015
Tetrachloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
Toluene	ND	ug/L	0.5	3/20/2015	3/20/2015
Total Xylene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/20/2015	3/20/2015
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/20/2015	3/20/2015
Trichloroethene	ND	ug/L	0.5	3/20/2015	3/20/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/20/2015	3/20/2015
Vinyl Chloride	ND	ug/L	0.5	3/20/2015	3/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Sample Number	150318006-001	**Sampling Date**	3/16/2015	**Date/Time Received**	3/17/2015 3:30 PM
Client Sample ID	NSH-019-031615	**Sampling Time**	1:00 PM	**Extraction Date**	3/19/15
Matrix	Water	**Sample Location**	W5C0258-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	3/20/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150318006-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	94.8	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.39	ug/L	5	87.8	62-139	3/19/2015	3/20/2015
Acenaphthene	4.21	ug/L	5	84.2	70-135	3/19/2015	3/20/2015
Acenaphthylene	4.26	ug/L	5	85.2	71-121	3/19/2015	3/20/2015
Anthracene	4.25	ug/L	5	85.0	63-113	3/19/2015	3/20/2015
Benzo(ghi)perylene	4.34	ug/L	5	86.8	76-161	3/19/2015	3/20/2015
Benzo[a]anthracene	4.73	ug/L	5	94.6	79-142	3/19/2015	3/20/2015
Benzo[a]pyrene	4.31	ug/L	5	86.2	71-163	3/19/2015	3/20/2015
2-Methylnaphthalene	4.76	ug/L	5	95.2	56-128	3/19/2015	3/20/2015
Benzo[k]fluoranthene	4.20	ug/L	5	84.0	69-169	3/19/2015	3/20/2015
Pyrene	4.19	ug/L	5	83.8	80-119	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	4.37	ug/L	5	87.4	75-158	3/19/2015	3/20/2015
Fluoranthene	4.24	ug/L	5	84.8	74-120	3/19/2015	3/20/2015
Fluorene	4.39	ug/L	5	87.8	60-116	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	4.32	ug/L	5	86.4	72-160	3/19/2015	3/20/2015
Naphthalene	4.22	ug/L	5	84.4	51-122	3/19/2015	3/20/2015
Phenanthrene	4.24	ug/L	5	84.8	77-126	3/19/2015	3/20/2015
Benzo[b]fluoranthene	4.60	ug/L	5	92.0	69-168	3/19/2015	3/20/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.36	ug/L	5	87.2	0.7	0-50	3/19/2015	3/20/2015
Acenaphthene	4.21	ug/L	5	84.2	0.0	0-50	3/19/2015	3/20/2015
Acenaphthylene	4.20	ug/L	5	84.0	1.4	0-50	3/19/2015	3/20/2015
Anthracene	4.29	ug/L	5	85.8	0.9	0-50	3/19/2015	3/20/2015
Benzo(ghi)perylene	4.38	ug/L	5	87.6	0.9	0-50	3/19/2015	3/20/2015
Benzo[a]anthracene	4.74	ug/L	5	94.8	0.2	0-50	3/19/2015	3/20/2015
Benzo[a]pyrene	4.30	ug/L	5	86.0	0.2	0-50	3/19/2015	3/20/2015
2-Methylnaphthalene	4.73	ug/L	5	94.6	0.6	0-50	3/19/2015	3/20/2015
Benzo[k]fluoranthene	4.21	ug/L	5	84.2	0.2	0-50	3/19/2015	3/20/2015
Pyrene	4.26	ug/L	5	85.2	1.7	0-50	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	4.45	ug/L	5	89.0	1.8	0-50	3/19/2015	3/20/2015
Fluoranthene	4.29	ug/L	5	85.8	1.2	0-50	3/19/2015	3/20/2015
Fluorene	4.34	ug/L	5	86.8	1.1	0-50	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	4.25	ug/L	5	85.0	1.6	0-50	3/19/2015	3/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150318006
Project Name: SVL #W5C0258

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.24	ug/L	5	84.8	0.5	0-50	3/19/2015	3/20/2015
Phenanthrene	4.28	ug/L	5	85.6	0.9	0-50	3/19/2015	3/20/2015
Benzo[b]fluoranthene	4.53	ug/L	5	90.6	1.5	0-50	3/19/2015	3/20/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/19/2015	3/20/2015
Acenaphthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Acenaphthylene	ND	ug/L	0.01	3/19/2015	3/20/2015
Anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Chrysene	ND	ug/L	0.01	3/19/2015	3/20/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/19/2015	3/20/2015
Fluoranthene	ND	ug/L	0.01	3/19/2015	3/20/2015
Fluorene	ND	ug/L	0.01	3/19/2015	3/20/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Naphthalene	ND	ug/L	0.01	3/19/2015	3/20/2015
Phenanthrene	ND	ug/L	0.01	3/19/2015	3/20/2015
Pyrene	ND	ug/L	0.01	3/19/2015	3/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150318006
Order Date: 3/18/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5C0258
Comment:

Sample #: 150318006-001 **Customer Sample #:** NSH-019-031615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/16/2015
Quantity: 4 **Date Received:** 3/17/2015 3:30:00 PM **Time Collected:** 1:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	3/27/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	3/27/2015	***Normal (~10 Days)***

Sample #: 150318006-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/16/2015
Quantity: 1 **Date Received:** 3/17/2015 3:30:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	3/27/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	3.5
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5C0258

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley & Aldrich
Contact: Lauren Candreva
Address: 400 E. Van Buren St Ste 545
Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: LCandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44 St, Suite 300
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and o
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-019-031615	3/16/15	1300	AN	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica sample was field filtered w/ a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									UPS Tracking No A310 210 624 6
6																									
7																									
8																									
9																									
10																									

Relinquished by: Jordan Nelson	Date: 3/16/15	Time: 14:00	Received by: [signature]	Date: 3-17-15	Time: 10:00
Relinquished by: J Jacobson	Date: 3-17-15	Time: 1155	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-019-031615	W5C0258-01	Ground Water	16-Mar-15 13:00	JN	17-Mar-2015	
TRIP BLANK	W5C0258-02	Ground Water	16-Mar-15 00:00	JN	17-Mar-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Client Sample ID: **NSH-019-031615**
SVL Sample ID: **W5C0258-01 (Ground Water)**

Sampled: 16-Mar-15 13:00
Received: 17-Mar-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W512109	AS	03/17/15 16:46	U
EPA 200.7	**Calcium**	46.6	mg/L	0.040	0.029		W512109	AS	03/17/15 16:46	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W512109	AS	03/17/15 16:46	U
EPA 200.7	**Magnesium**	16.2	mg/L	0.20	0.11		W512109	AS	03/17/15 16:46	
EPA 200.7	**Potassium**	1.83	mg/L	0.50	0.17		W512109	AS	03/17/15 16:46	
EPA 200.7	**Silica (SiO2)**	42.3	mg/L	0.17	0.12		W512109	AS	03/17/15 16:46	
EPA 200.7	**Sodium**	24.4	mg/L	0.50	0.05		W512109	AS	03/17/15 16:46	
EPA 200.8	**Antimony**	0.00044	mg/L	0.00300	0.00019		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Arsenic**	0.00114	mg/L	0.00300	0.00027		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Barium**	0.0237	mg/L	0.00100	0.000099		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Beryllium**	0.00014	mg/L	0.00020	0.000048		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Boron**	0.0362	mg/L	0.0050	0.0012		W512019	KWH	03/17/15 12:17	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W512019	KWH	03/17/15 12:17	U
EPA 200.8	**Chromium**	0.0057	mg/L	0.0015	0.0004		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Cobalt**	0.00014	mg/L	0.00100	0.000054		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Copper**	0.0122	mg/L	0.00100	0.00015		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Lead**	0.00007	mg/L	0.00300	0.000031		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Manganese**	0.000643	mg/L	0.00100	0.000025		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Molybdenum**	0.0332	mg/L	0.00100	0.00009		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Nickel**	0.0015	mg/L	0.0010	0.0004		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Selenium**	0.0029	mg/L	0.0030	0.0006		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Silver**	0.000032	mg/L	0.000100	0.000021		W512019	KWH	03/17/15 12:17	J
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W512019	KWH	03/17/15 12:17	U
EPA 200.8	**Uranium**	0.0233	mg/L	0.00100	0.000014		W512019	KWH	03/17/15 12:17	
EPA 200.8	**Vanadium**	0.0029	mg/L	0.0030	0.0009		W512019	KWH	03/17/15 12:17	J
EPA 200.8	**Zinc**	0.993	mg/L	0.0050	0.0010		W512019	KWH	03/17/15 12:17	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W513032	STA	03/24/15 13:43	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	179	mg/L as CaCO3	1.0			W512158	AGF	03/18/15 14:53	
SM 2320B	**Bicarbonate**	179	mg/L as CaCO3	1.0			W512158	AGF	03/18/15 14:53	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W512158	AGF	03/18/15 14:53	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W512158	AGF	03/18/15 14:53	U
SM 2510 B	**Specific conductance**	457	µmhos/cm	5.00			W512145	JDM	03/18/15 12:35	
SM 2540 C	**Total Diss. Solids**	275	mg/L	10			W512141	JDM	03/18/15 15:00	
SM 4500 H B	**pH @19.0°C**	7.85	pH Units				W512158	AGF	03/18/15 14:53	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W513104	VRH	03/26/15 09:43	U
SM 4500-P-E	**Orthophosphate as P**	0.006	mg/L	0.010	0.004		W512093	SM	03/17/15 16:15	J
SM 4500-S-F	**Sulfide**	0.40	mg/L	1.00	0.27		W512221	VRH	03/19/15 13:38	J
SM 5310B	Total Organic Carbon	< 0.24	mg/L	1.00	0.24		W512183	SM	03/19/15 20:47	U

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Client Sample ID: **NSH-019-031615**
SVL Sample ID: **W5C0258-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 16-Mar-15 13:00
Received: 17-Mar-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	27.4	mg/L	5.00	1.40	25	W511236	JMW	03/17/15 13:32	D2
EPA 300.0	**Fluoride**	3.14	mg/L	0.100	0.022		W511236	JMW	03/17/15 13:19	
EPA 300.0	**Nitrate as N**	1.37	mg/L	0.050	0.008		W511236	JMW	03/17/15 13:19	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W511236	JMW	03/17/15 13:19	U
EPA 300.0	**Sulfate as SO4**	14.6	mg/L	0.30	0.05		W511236	JMW	03/17/15 13:19	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.80 meq/L Anion Sum: 4.92 meq/L C/A Balance: -1.18 % Calculated TDS: 290 TDS/cTDS: 0.95 TDS/eC: 0.60

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W512109	17-Mar-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W512109	17-Mar-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W512109	17-Mar-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W512109	17-Mar-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W512109	17-Mar-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W512109	17-Mar-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W512109	17-Mar-15	U
EPA 200.8	Antimony	mg/L	0.00027	0.00019	0.00300	W512019	17-Mar-15	J
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W512019	17-Mar-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W512019	17-Mar-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W512019	17-Mar-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W512019	17-Mar-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W512019	17-Mar-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W512019	17-Mar-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W512019	17-Mar-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W512019	17-Mar-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W512019	17-Mar-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W512019	17-Mar-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W512019	17-Mar-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W512019	17-Mar-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W512019	17-Mar-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W512019	17-Mar-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W512019	17-Mar-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W512019	17-Mar-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W512019	17-Mar-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W512019	17-Mar-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W513032	24-Mar-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.69		1.0	W512158	18-Mar-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.69		1.0	W512158	18-Mar-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W512158	18-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W512158	18-Mar-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W512141	18-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0030	0.0025	0.0100	W513104	26-Mar-15	J
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W512093	17-Mar-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W512221	19-Mar-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W512183	19-Mar-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	0.07	0.06	0.20	W511236	13-Mar-15	J
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W511236	13-Mar-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W511236	13-Mar-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W511236	13-Mar-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W511236	13-Mar-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.00	1.00	99.8	85 - 115	W512109	17-Mar-15	
EPA 200.7	Calcium	mg/L	19.4	20.0	96.9	85 - 115	W512109	17-Mar-15	
EPA 200.7	Iron	mg/L	9.65	10.0	96.5	85 - 115	W512109	17-Mar-15	
EPA 200.7	Magnesium	mg/L	19.1	20.0	95.6	85 - 115	W512109	17-Mar-15	
EPA 200.7	Potassium	mg/L	20.3	20.0	102	85 - 115	W512109	17-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	10.2	10.7	95.8	85 - 115	W512109	17-Mar-15	
EPA 200.7	Sodium	mg/L	18.6	19.0	98.0	85 - 115	W512109	17-Mar-15	
EPA 200.8	Antimony	mg/L	0.0226	0.0250	90.5	85 - 115	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0242	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0240	0.0250	95.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0239	0.0250	95.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0246	0.0250	98.3	85 - 115	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0241	0.0250	96.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0226	0.0250	90.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0236	0.0250	94.3	85 - 115	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0241	0.0250	96.4	85 - 115	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0242	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0240	0.0250	95.9	85 - 115	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0232	0.0250	92.7	85 - 115	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0244	0.0250	97.5	85 - 115	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0250	0.0250	99.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0249	0.0250	99.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0242	0.0250	96.9	85 - 115	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0250	0.0250	99.8	85 - 115	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0241	0.0250	96.6	85 - 115	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.0251	0.0250	100	85 - 115	W512019	17-Mar-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00498	0.00500	99.6	85 - 115	W513032	24-Mar-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.7	99.3	97.4	85 - 115	W512158	18-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.7	99.3	97.4	85 - 115	W512158	18-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	298	306	97.3	90 - 110	W512145	18-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.140	0.150	93.3	90 - 110	W513104	26-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.827	0.786	105	90 - 110	W512093	17-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.49	2.50	99.8	80 - 120	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	31.2	34.3	91.0	90 - 110	W512183	19-Mar-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.76	3.00	92.0	90 - 110	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	1.92	2.00	95.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	1.94	2.01	96.5	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.52	2.51	100	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	9.72	10.0	97.2	90 - 110	W511236	13-Mar-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	179	179	0.0	20	W512158	18-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	179	179	0.0	20	W512158	18-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W512158	18-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W512158	18-Mar-15	U
SM 2510 B	Specific conductance	µmhos/cm	462	457	1.1	20	W512145	18-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	302	308	2.0	10	W512141	18-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	628	629	0.2	10	W512141	18-Mar-15	
SM 4500 H B	pH	pH Units	7.88	7.85	0.4	20	W512158	18-Mar-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.05	<0.036	1.00	105	70 - 130	W512109	17-Mar-15	
EPA 200.7	Calcium	mg/L	65.5	46.6	20.0	94.2	70 - 130	W512109	17-Mar-15	
EPA 200.7	Iron	mg/L	10.0	<0.026	10.0	100	70 - 130	W512109	17-Mar-15	
EPA 200.7	Magnesium	mg/L	36.0	16.2	20.0	98.8	70 - 130	W512109	17-Mar-15	
EPA 200.7	Potassium	mg/L	23.3	1.83	20.0	107	70 - 130	W512109	17-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	51.8	42.3	10.7	88.4	70 - 130	W512109	17-Mar-15	
EPA 200.7	Sodium	mg/L	43.6	24.4	19.0	101	70 - 130	W512109	17-Mar-15	
EPA 200.8	Antimony	mg/L	0.0246	0.00038	0.0250	96.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0296	0.00060	0.0250	116	70 - 130	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0267	0.00202	0.0250	98.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0242	0.00047	0.0250	94.8	70 - 130	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0684	0.0469	0.0250	86.1	70 - 130	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0250	<0.000072	0.0250	100	70 - 130	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0278	0.0040	0.0250	94.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0238	0.00012	0.0250	94.9	70 - 130	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0243	0.00127	0.0250	92.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0230	0.00011	0.0250	91.5	70 - 130	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0371	0.0126	0.0250	98.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0676	0.0419	0.0250	103	70 - 130	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0258	0.0016	0.0250	96.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0327	0.0018	0.0250	124	70 - 130	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0240	<0.000021	0.0250	96.0	70 - 130	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0232	<0.000026	0.0250	92.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0294	0.00523	0.0250	96.6	70 - 130	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0266	0.0019	0.0250	98.7	70 - 130	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.970	0.938	0.0250	126	70 - 130	W512019	17-Mar-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W513032	24-Mar-15	
EPA 245.1	Mercury	mg/L	0.00098	<0.00004	0.00100	98.0	70 - 130	W513032	24-Mar-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0980	0.0030	0.100	95.0	75 - 125	W513104	26-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.543	0.006	0.500	107	75 - 125	W512093	17-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.41	<0.27	2.50	96.6	80 - 120	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	0.99	50.0	100	80 - 120	W512183	19-Mar-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	2.99	0.24	3.00	91.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Chloride	mg/L	19.1	16.4	3.00	91.6	90 - 110	W511236	17-Mar-15	D2,M3

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Fluoride	mg/L	1.99	0.039	2.00	97.3	90 - 110	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	4.76	2.81	2.00	97.5	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	1.98	<0.008	2.00	98.8	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrate as N	mg/L	4.03	1.98	2.00	103	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.08	<0.014	2.00	104	90 - 110	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.05	<0.014	2.00	103	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	14.5	4.47	10.0	101	90 - 110	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	69.7	59.7	10.0	100	90 - 110	W511236	17-Mar-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.09	1.05	1.00	109	4.3	20	W512109	17-Mar-15	
EPA 200.7	Calcium	mg/L	66.0	65.5	20.0	97.1	0.9	20	W512109	17-Mar-15	
EPA 200.7	Iron	mg/L	10.2	10.0	10.0	102	2.1	20	W512109	17-Mar-15	
EPA 200.7	Magnesium	mg/L	36.6	36.0	20.0	102	1.8	20	W512109	17-Mar-15	
EPA 200.7	Potassium	mg/L	23.8	23.3	20.0	110	2.1	20	W512109	17-Mar-15	
EPA 200.7	Silica (SiO2)	mg/L	52.1	51.8	10.7	91.4	0.6	20	W512109	17-Mar-15	
EPA 200.7	Sodium	mg/L	43.9	43.6	19.0	103	0.7	20	W512109	17-Mar-15	
EPA 200.8	Antimony	mg/L	0.0247	0.0246	0.0250	97.2	0.3	20	W512019	17-Mar-15	
EPA 200.8	Arsenic	mg/L	0.0285	0.0296	0.0250	112	3.6	20	W512019	17-Mar-15	
EPA 200.8	Barium	mg/L	0.0258	0.0267	0.0250	95.2	3.5	20	W512019	17-Mar-15	
EPA 200.8	Beryllium	mg/L	0.0245	0.0242	0.0250	96.3	1.5	20	W512019	17-Mar-15	
EPA 200.8	Boron	mg/L	0.0691	0.0684	0.0250	89.0	1.1	20	W512019	17-Mar-15	
EPA 200.8	Cadmium	mg/L	0.0243	0.0250	0.0250	97.1	3.1	20	W512019	17-Mar-15	
EPA 200.8	Chromium	mg/L	0.0280	0.0278	0.0250	95.9	0.9	20	W512019	17-Mar-15	
EPA 200.8	Cobalt	mg/L	0.0233	0.0238	0.0250	92.7	2.4	20	W512019	17-Mar-15	
EPA 200.8	Copper	mg/L	0.0245	0.0243	0.0250	92.9	0.9	20	W512019	17-Mar-15	
EPA 200.8	Lead	mg/L	0.0233	0.0230	0.0250	92.9	1.5	20	W512019	17-Mar-15	
EPA 200.8	Manganese	mg/L	0.0360	0.0371	0.0250	93.8	2.9	20	W512019	17-Mar-15	
EPA 200.8	Molybdenum	mg/L	0.0656	0.0676	0.0250	95.1	3.0	20	W512019	17-Mar-15	
EPA 200.8	Nickel	mg/L	0.0249	0.0258	0.0250	92.8	3.8	20	W512019	17-Mar-15	
EPA 200.8	Selenium	mg/L	0.0305	0.0327	0.0250	115	7.1	20	W512019	17-Mar-15	
EPA 200.8	Silver	mg/L	0.0234	0.0240	0.0250	93.8	2.3	20	W512019	17-Mar-15	
EPA 200.8	Thallium	mg/L	0.0233	0.0232	0.0250	93.3	0.6	20	W512019	17-Mar-15	
EPA 200.8	Uranium	mg/L	0.0296	0.0294	0.0250	97.5	0.8	20	W512019	17-Mar-15	
EPA 200.8	Vanadium	mg/L	0.0264	0.0266	0.0250	97.9	0.8	20	W512019	17-Mar-15	
EPA 200.8	Zinc	mg/L	0.969	0.970	0.0250	124	0.1	20	W512019	17-Mar-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00100	0.00099	0.00100	100	1.0	20	W513032	24-Mar-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0990	0.0980	0.100	96.0	1.0	20	W513104	26-Mar-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.543	0.543	0.500	107	0.0	20	W512093	17-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.45	2.41	2.50	98.2	1.7	20	W512221	19-Mar-15	
SM 5310B	Total Organic Carbon	mg/L	50.2	51.0	50.0	98.5	1.5	20	W512183	19-Mar-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	3.12	2.99	3.00	96.0	4.1	20	W511236	13-Mar-15	
EPA 300.0	Fluoride	mg/L	2.07	1.99	2.00	102	4.2	20	W511236	13-Mar-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015 / EXCELSIOR
Work Order: **W5C0258**
Reported: 23-Apr-15 15:22

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)											
EPA 300.0	Nitrate as N	mg/L	2.07	1.98	2.00	103	4.4	20	W511236	13-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.16	2.08	2.00	108	3.7	20	W511236	13-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	15.0	14.5	10.0	106	3.4	20	W511236	13-Mar-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

Friday, April 24, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1503601
Project Name:
Project Number: 5C0430

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 3/31/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

JRK/exk
Enclosure(s):

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1503601

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1503601
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5C0430
Client PO Number: 15178

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-020-032515	1503601-1		WATER	25-Mar-15	14:00

ALS 1503601

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Page 1 of 1

FOR SVL USE ONLY
SVL JOB #
TEMP on Receipt: 5C0430

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15178

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross A/B 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972							Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																							
1	NSH-020-032615	3/25/15	1400	CP	2	3			X					X	X	X								Call Chris Meyer with Question
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
L Jacobson	3-26-15	1241	C Trimble	3-31-15	0940
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1503601

Project Manager: JK Initials: CDT Date: 3-31-15

1. Does this project require any special handling in addition to standard ALS procedures?			YES	NO
2. Are custody seals on shipping containers intact?	NONE		YES	NO
3. Are Custody seals on sample containers intact?	NONE		YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?			YES	NO
5. Are the COC and bottle labels complete and legible?			YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)			YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF		YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A		YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A		YES	NO
10. Is there sufficient sample for the requested analyses?			YES	NO
11. Were all samples placed in the proper containers for the requested analyses?			YES	NO
12. Are all samples within holding times for the requested analyses?			YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)			YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A		YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A		YES	NO
16. Were the samples shipped on ice?			YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY		YES	NO
Cooler #:	1			
Temperature (°C):	Amb			
No. of custody seals on cooler:	1			
DOT Survey/ Acceptance Information — External µR/hr reading:	11			
Background µR/hr reading:	11			

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: 3-31-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

1S03601

DWT: 15,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4442 7668

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

60.0A 01/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

RRD R 1114

Client: SVL Analytical
Project: 5C0430
Sample ID: NSH-020-032515
Legal Location:
Collection Date: 3/25/2015 14:00

Date: *24-Apr-15*
Work Order: 1503601
Lab ID: 1503601-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **4/1/2015**	PrepBy: **DKL**
GROSS ALPHA	**3.4 (+/- 1.5)**		**1.9**	**pCi/l**	NA	4/6/2015 08:31
GROSS BETA	ND (+/- 1.6)	U	3.4	pCi/l	NA	4/6/2015 08:31
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **4/16/2015**	PrepBy: **SAM**
Tracer: U-232	*81.6*		*30-110*	*%REC*	DL = NA	4/21/2015 13:56
U-234	**1.2 (+/- 0.26)**		**0.09**	**pCi/l**	NA	4/21/2015 13:56
U-235	0.078 (+/- 0.05)	LT	0.043	pCi/l	NA	4/21/2015 13:56
U-238	**0.66 (+/- 0.16)**		**0.07**	**pCi/l**	NA	4/21/2015 13:56
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **4/15/2015**	PrepBy: **PJW**
Ra-226	0.109 (+/- 0.082)	LT	0.037	pCi/l	NA	4/22/2015 14:13
Carr: BARIUM	*99.1*		*40-110*	*%REC*	DL = NA	4/22/2015 14:13
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/6/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.21)	U	0.44	pCi/l	NA	4/14/2015 08:35
Carr: BARIUM	*99.1*		*40-110*	*%REC*	DL = NA	4/14/2015 08:35

Client:	SVL Analytical	**Date:**	*24-Apr-15*
Project:	5C0430	**Work Order:**	1503601
Sample ID:	NSH-020-032515	**Lab ID:**	1503601-1
Legal Location:		**Matrix:**	WATER
Collection Date:	3/25/2015 14:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1503601
Project: 5C0430

Date: *4/24/2015 8:10:*

QC BATCH REPORT

Batch ID: **RE150415-1-3** Instrument ID: **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150415-1** Units: **pCi/l** Analysis Date: **4/22/2015 14:52**
Client ID: Run ID: **RE150415-1A** Prep Date: **4/15/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	27.2 (+/- 6.9)	0.3	30.71		88.5	67-120					P
Carr: BARIUM	31540		33150		95.1	40-110					

LCSD Sample ID: **RE150415-1** Units: **pCi/l** Analysis Date: **4/22/2015 14:52**
Client ID: Run ID: **RE150415-1A** Prep Date: **4/15/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	27.8 (+/- 7)	0.3	30.71		90.4	67-120		27.2	0.06	2.13	P
Carr: BARIUM	32810		33140		99	40-110		31540			

MB Sample ID: **RE150415-1** Units: **pCi/l** Analysis Date: **4/22/2015 14:13**
Client ID: Run ID: **RE150415-1A** Prep Date: **4/15/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	ND	0.154									U
Carr: BARIUM	31670		33150		95.6	40-110					

The following samples were analyzed in this batch: 1503601-1

Client: SVL Analytical
Work Order: 1503601
Project: 5C0430

QC BATCH REPORT

Batch ID: **AS150415-1-6** Instrument ID: **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150415-1** Units: **pCi/l** Analysis Date: **4/21/2015 13:58**
Client ID: Run ID: **AS150415-1U** Prep Date: **4/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
U-234	4.29 (+/- 0.72)	0.04	4.416		97.2	82-122					P
U-238	4.97 (+/- 0.82)	0.03	4.585		108	78-126					P
Tracer: U-232	3.45	0.04	4.17		82.6	30-110					

LCSD Sample ID: **AS150415-1** Units: **pCi/l** Analysis Date: **4/21/2015 13:58**
Client ID: Run ID: **AS150415-1U** Prep Date: **4/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
U-234	4.57 (+/- 0.75)	0.04	4.416		103	82-122		4.29	0.27	2.13	P
U-238	4.61 (+/- 0.75)	0.03	4.585		100	78-126		4.97	0.33	2.13	P
Tracer: U-232	3.83	0.05	4.17		91.8	30-110		3.45			

MB Sample ID: **AS150415-1** Units: **pCi/l** Analysis Date: **4/21/2015 13:58**
Client ID: Run ID: **AS150415-1U** Prep Date: **4/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
U-234	ND	0.044									U
U-235	ND	0.021									U
U-238	ND	0.041									U
Tracer: U-232	3.63	0.04	4.17		87.1	30-110					

The following samples were analyzed in this batch: 1503601-1

Client: SVL Analytical
Work Order: 1503601
Project: 5C0430

QC BATCH REPORT

Batch ID: **AB150401-4-5** Instrument ID: **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150401-4** Units: **pCi/l** Analysis Date: **4/6/2015 11:37**

Client ID: Run ID: **AB150401-4A** Prep Date: **4/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
GROSS ALPHA	213 (+/- 35)	2	224.3		94.8	70-130					P
GROSS BETA	206 (+/- 33)	5	204.4		101	70-130					P,M3

MB Sample ID: **AB150401-4** Units: **pCi/l** Analysis Date: **4/3/2015 14:16**

Client ID: Run ID: **AB150401-4A** Prep Date: **4/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
GROSS ALPHA	ND	0.59									U
GROSS BETA	ND	1.05									U

The following samples were analyzed in this batch: 1503601-1

Client: SVL Analytical
Work Order: 1503601
Project: 5C0430

QC BATCH REPORT

Batch ID: **RA150406-2-3** Instrument ID: **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150406-2** Units: **pCi/l** Analysis Date: **4/14/2015 08:35**
Client ID: Run ID: **RA150406-2A** Prep Date: **4/6/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	8.7 (+/- 2.1)	0.5	7.87		111	70-130					P
Carr: BARIUM	31540		33150		95.1	40-110					

LCSD Sample ID: **RA150406-2** Units: **pCi/l** Analysis Date: **4/14/2015 08:35**
Client ID: Run ID: **RA150406-2A** Prep Date: **4/6/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	6.4 (+/- 1.5)	0.4	7.87		80.9	70-130		8.7	0.92	2.13	P
Carr: BARIUM	32810		33140		99	40-110		31540			

MB Sample ID: **RA150406-2** Units: **pCi/l** Analysis Date: **4/14/2015 08:35**
Client ID: Run ID: **RA150406-2A** Prep Date: **4/6/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	ND	0.45									U
Carr: BARIUM	31670		33150		95.6	40-110					

The following samples were analyzed in this batch: 1503601-1

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	NSH-020-032515	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0430-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/31/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	NSH-020-032515	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0430-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	NSH-020-032515	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0430-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Toluene	1.87	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150327018-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.8	70-130
Bromofluorobenzene	EPA 524.3	91.2	70-130
Toluene-d8	EPA 524.3	97.4	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001A	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	NSH-020-032515 DUPLICATE	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0430-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/31/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001A	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015	11:10 AM
Client Sample ID	NSH-020-032515 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5C0430-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001A	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015	11:10 AM
Client Sample ID	NSH-020-032515 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5C0430-01			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Toluene	1.76	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150327018-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.0	70-130
Bromofluorobenzene	EPA 524.3	93.0	70-130
Toluene-d8	EPA 524.3	99.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-002	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0430-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	3/31/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-002	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0430-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-002	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0430-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	3/31/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150327018-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	101.0	70-130
Bromofluorobenzene	EPA 524.3	94.2	70-130
Toluene-d8	EPA 524.3	97.2	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.75	ug/L	10	97.5	70-130	3/31/2015	3/31/2015
Toluene	9.64	ug/L	10	96.4	70-130	3/31/2015	3/31/2015
Tetrachloroethene	9.62	ug/L	10	96.2	70-130	3/31/2015	3/31/2015
o-Xylene	8.84	ug/L	10	88.4	70-130	3/31/2015	3/31/2015
Ethylbenzene	8.88	ug/L	10	88.8	70-130	3/31/2015	3/31/2015
Chlorobenzene	9.14	ug/L	10	91.4	70-130	3/31/2015	3/31/2015
Benzene	9.93	ug/L	10	99.3	70-130	3/31/2015	3/31/2015
1,1-Dichloroethene	9.86	ug/L	10	98.6	70-130	3/31/2015	3/31/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.8	ug/L	10	108.0	10.2	0-25	3/31/2015	3/31/2015
Toluene	10.3	ug/L	10	103.0	6.6	0-25	3/31/2015	3/31/2015
Tetrachloroethene	10.8	ug/L	10	108.0	11.6	0-25	3/31/2015	3/31/2015
o-Xylene	9.17	ug/L	10	91.7	3.7	0-25	3/31/2015	3/31/2015
Ethylbenzene	9.18	ug/L	10	91.8	3.3	0-25	3/31/2015	3/31/2015
Chlorobenzene	9.78	ug/L	10	97.8	6.8	0-25	3/31/2015	3/31/2015
Benzene	10.1	ug/L	10	101.0	1.7	0-25	3/31/2015	3/31/2015
1,1-Dichloroethene	10.7	ug/L	10	107.0	8.2	0-25	3/31/2015	3/31/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1-Dichloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1-Dichloroethene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,1-dichloropropene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,2,4-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2-Dichloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
1,3-Dichloropropane	ND	ug/L	0.5	3/31/2015	3/31/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
2,2-Dichloropropane	ND	ug/L	0.5	3/31/2015	3/31/2015
2-Butanone	ND	ug/L	0.5	3/31/2015	3/31/2015
2-Chlorotoluene	ND	ug/L	0.5	3/31/2015	3/31/2015
4-Chlorotoluene	ND	ug/L	0.5	3/31/2015	3/31/2015
Acetone	ND	ug/L	2.5	3/31/2015	3/31/2015
Acrylonitrile	ND	ug/L	0.5	3/31/2015	3/31/2015
Benzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Bromobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Bromochloromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Bromodichloromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Bromoform	ND	ug/L	0.5	3/31/2015	3/31/2015
Bromomethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Carbon disulfide	ND	ug/L	0.5	3/31/2015	3/31/2015
Carbon Tetrachloride	ND	ug/L	0.5	3/31/2015	3/31/2015
Chlorobenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Chloroethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Chloroform	ND	ug/L	0.5	3/31/2015	3/31/2015
Chloromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	3/31/2015	3/31/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	3/31/2015
Dibromochloromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Dibromomethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Dichlorodifluoromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Diethyl ether	ND	ug/L	0.5	3/31/2015	3/31/2015
Ethylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Hexachlorobutadiene	ND	ug/L	0.5	3/31/2015	3/31/2015
Iodomethane	ND	ug/L	0.5	3/31/2015	3/31/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
m+p-Xylene	ND	ug/L	0.5	3/31/2015	3/31/2015
Methylene chloride	ND	ug/L	0.5	3/31/2015	3/31/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	3/31/2015	3/31/2015
Naphthalene	ND	ug/L	0.5	3/31/2015	3/31/2015
n-Butylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
n-Propylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
o-Xylene	ND	ug/L	0.5	3/31/2015	3/31/2015
p-isopropyltoluene	ND	ug/L	0.5	3/31/2015	3/31/2015
sec-Butylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Styrene	ND	ug/L	0.5	3/31/2015	3/31/2015
tert-Butylbenzene	ND	ug/L	0.5	3/31/2015	3/31/2015
Tetrachloroethene	ND	ug/L	0.5	3/31/2015	3/31/2015
Toluene	ND	ug/L	0.5	3/31/2015	3/31/2015
Total Xylene	ND	ug/L	0.5	3/31/2015	3/31/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	3/31/2015	3/31/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	3/31/2015	3/31/2015
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	3/31/2015	3/31/2015
Trichloroethene	ND	ug/L	0.5	3/31/2015	3/31/2015
Trichlorofluoromethane	ND	ug/L	0.5	3/31/2015	3/31/2015
Vinyl Chloride	ND	ug/L	0.5	3/31/2015	3/31/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Sample Number	150327018-001	**Sampling Date**	3/25/2015	**Date/Time Received**	3/27/2015 11:10 AM
Client Sample ID	NSH-020-032515	**Sampling Time**	2:00 PM	**Extraction Date**	3/31/15
Matrix	Water	**Sample Location**	W5C0430-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150327018-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	93.4	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.58	ug/L	5	71.6	62-139	3/31/2015	4/6/2015
Acenaphthene	3.59	ug/L	5	71.8	70-135	3/31/2015	4/6/2015
Acenaphthylene	3.63	ug/L	5	72.6	69-121	3/31/2015	4/6/2015
Anthracene	3.54	ug/L	5	70.8	63-113	3/31/2015	4/6/2015
Benzo(ghi)perylene	3.56	ug/L	5	71.2	71-141	3/31/2015	4/6/2015
Benzo[a]anthracene	4.05	ug/L	5	81.0	71-142	3/31/2015	4/6/2015
Benzo[a]pyrene	3.73	ug/L	5	74.6	71-143	3/31/2015	4/6/2015
2-Methylnaphthalene	4.05	ug/L	5	81.0	56-128	3/31/2015	4/6/2015
Benzo[k]fluoranthene	3.56	ug/L	5	71.2	69-149	3/31/2015	4/6/2015
Pyrene	3.62	ug/L	5	72.4	69-119	3/31/2015	4/6/2015
Dibenz[a,h]anthracene	3.61	ug/L	5	72.2	68-138	3/31/2015	4/6/2015
Fluoranthene	3.67	ug/L	5	73.4	67-120	3/31/2015	4/6/2015
Fluorene	3.65	ug/L	5	73.0	60-116	3/31/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	3.61	ug/L	5	72.2	68-140	3/31/2015	4/6/2015
Naphthalene	3.70	ug/L	5	74.0	51-122	3/31/2015	4/6/2015
Phenanthrene	3.68	ug/L	5	73.6	71-126	3/31/2015	4/6/2015
Benzo[b]fluoranthene	3.98	ug/L	5	79.6	68-148	3/31/2015	4/6/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.55	ug/L	5	71.0	0.8	0-50	3/31/2015	4/6/2015
Acenaphthene	3.68	ug/L	5	73.6	2.5	0-50	3/31/2015	4/6/2015
Acenaphthylene	3.72	ug/L	5	74.4	2.4	0-50	3/31/2015	4/6/2015
Anthracene	3.54	ug/L	5	70.8	0.0	0-50	3/31/2015	4/6/2015
Benzo(ghi)perylene	3.77	ug/L	5	75.4	5.7	0-50	3/31/2015	4/6/2015
Benzo[a]anthracene	4.03	ug/L	5	80.6	0.5	0-50	3/31/2015	4/6/2015
Benzo[a]pyrene	3.80	ug/L	5	76.0	1.9	0-50	3/31/2015	4/6/2015
2-Methylnaphthalene	4.19	ug/L	5	83.8	3.4	0-50	3/31/2015	4/6/2015
Benzo[k]fluoranthene	3.58	ug/L	5	71.6	0.6	0-50	3/31/2015	4/6/2015
Pyrene	3.56	ug/L	5	71.2	1.7	0-50	3/31/2015	4/6/2015
Dibenz[a,h]anthracene	3.81	ug/L	5	76.2	5.4	0-50	3/31/2015	4/6/2015
Fluoranthene	3.64	ug/L	5	72.8	0.8	0-50	3/31/2015	4/6/2015
Fluorene	3.74	ug/L	5	74.8	2.4	0-50	3/31/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	3.81	ug/L	5	76.2	5.4	0-50	3/31/2015	4/6/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150327018
Project Name: SVL #W5C0430

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.77	ug/L	5	75.4	1.9	0-50	3/31/2015	4/6/2015
Phenanthrene	3.65	ug/L	5	73.0	0.8	0-50	3/31/2015	4/6/2015
Benzo[b]fluoranthene	3.99	ug/L	5	79.8	0.3	0-50	3/31/2015	4/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	3/31/2015	4/6/2015
Acenaphthene	ND	ug/L	0.01	3/31/2015	4/6/2015
Acenaphthylene	ND	ug/L	0.01	3/31/2015	4/6/2015
Anthracene	ND	ug/L	0.01	3/31/2015	4/6/2015
Benzo(ghi)perylene	ND	ug/L	0.01	3/31/2015	4/6/2015
Benzo[a]anthracene	ND	ug/L	0.01	3/31/2015	4/6/2015
Benzo[a]pyrene	ND	ug/L	0.01	3/31/2015	4/6/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	3/31/2015	4/6/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	3/31/2015	4/6/2015
Chrysene	ND	ug/L	0.01	3/31/2015	4/6/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	3/31/2015	4/6/2015
Fluoranthene	ND	ug/L	0.01	3/31/2015	4/6/2015
Fluorene	ND	ug/L	0.01	3/31/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	3/31/2015	4/6/2015
Naphthalene	ND	ug/L	0.01	3/31/2015	4/6/2015
Phenanthrene	ND	ug/L	0.01	3/31/2015	4/6/2015
Pyrene	ND	ug/L	0.01	3/31/2015	4/6/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150327018
Order Date: 3/27/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5C0430
Comment:

Sample #: 150327018-001 **Customer Sample #:** NSH-020-032515

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/25/2015
Quantity: 4 **Date Received:** 3/27/2015 11:10:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	4/8/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	4/8/2015	***Normal (~10 Days)***

Sample #: 150327018-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/25/2015
Quantity: 1 **Date Received:** 3/27/2015 11:10:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	4/8/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	2.8
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5C0430

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley + Aldrich
Contact: Lauren Candreva
Address: 400 East Van Buren St. Suite 545 Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N. 44th St. Suite 300 Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-020-032515	3/25/15	1400	CR	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica Sample was Field Filtered w/ 0.45 µ disposable groundwater Filter capsule w/ HNO_3
2																									
3	TRIP BLANK					1																X			
4																									
5																									
6																									SHIPPED UPS, TRACKING: 1Z 9X8 989 23 1001-2793
7																									
8																									
9																									
10																									

Relinquished by:	Date: 3-25-15	Time: 14:30	Received by: C. Lan	Date: 3-25-15	Time: 1430
Relinquished by: Jacobson	Date: 3-26-15	Time: 1315	Received by:	Date: 3-26-15	Time: 9:55

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-020-032515	W5C0430-01	Water	25-Mar-15 14:00	CP	26-Mar-2015	
TRIP BLANK	W5C0430-02	Water	25-Mar-15 14:00	CP	26-Mar-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Client Sample ID: **NSH-020-032515**
SVL Sample ID: **W5C0430-01 (Water)**

Sampled: 25-Mar-15 14:00
Received: 26-Mar-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W514044	AS	04/06/15 17:32	U
EPA 200.7	**Calcium**	46.4	mg/L	0.040	0.029		W514044	AS	04/06/15 18:03	
EPA 200.7	**Iron**	0.043	mg/L	0.060	0.026		W514044	AS	04/06/15 17:32	J
EPA 200.7	**Magnesium**	10.3	mg/L	0.20	0.11		W514044	AS	04/06/15 18:03	
EPA 200.7	**Potassium**	1.42	mg/L	0.50	0.17		W514044	AS	04/06/15 17:32	
EPA 200.7	**Silica (SiO2)**	31.5	mg/L	0.17	0.12		W514044	AS	04/06/15 17:32	
EPA 200.7	**Sodium**	25.6	mg/L	0.50	0.05		W514044	AS	04/06/15 17:32	
EPA 200.8	**Antimony**	0.00033	mg/L	0.00300	0.00019		W514021	KWH	04/07/15 10:32	J
EPA 200.8	**Arsenic**	0.00056	mg/L	0.00300	0.00027		W514021	KWH	04/07/15 12:29	J
EPA 200.8	**Barium**	0.0681	mg/L	0.00100	0.000099		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Beryllium**	0.00013	mg/L	0.00020	0.000048		W514021	KWH	04/07/15 12:29	J
EPA 200.8	**Boron**	0.0366	mg/L	0.0050	0.0012		W514021	KWH	04/07/15 10:32	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W514021	KWH	04/07/15 10:32	U
EPA 200.8	**Chromium**	0.0041	mg/L	0.0015	0.0004		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Cobalt**	0.00020	mg/L	0.00100	0.000054		W514021	KWH	04/07/15 10:32	J
EPA 200.8	**Copper**	0.00608	mg/L	0.00100	0.00015		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Lead**	0.00028	mg/L	0.00300	0.000031		W514021	KWH	04/07/15 10:32	J
EPA 200.8	**Manganese**	0.0374	mg/L	0.00100	0.000025		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Molybdenum**	0.0243	mg/L	0.00100	0.00009		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Nickel**	0.0020	mg/L	0.0010	0.0004		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Selenium**	0.0020	mg/L	0.0030	0.0006		W514021	KWH	04/07/15 10:32	M1,J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W514021	KWH	04/07/15 10:32	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W514021	KWH	04/07/15 10:32	U
EPA 200.8	**Uranium**	0.00178	mg/L	0.00100	0.000014		W514021	KWH	04/07/15 10:32	
EPA 200.8	**Vanadium**	0.0032	mg/L	0.0030	0.0009		W514021	KWH	04/07/15 12:29	
EPA 200.8	**Zinc**	0.453	mg/L	0.0050	0.0010		W514021	KWH	04/07/15 10:32	M3
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W513223	STA	04/03/15 11:09	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	172	mg/L as CaCO3	1.0			W513204	AGF	03/30/15 09:03	
SM 2320B	**Bicarbonate**	172	mg/L as CaCO3	1.0			W513204	AGF	03/30/15 09:03	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W513204	AGF	03/30/15 09:03	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W513204	AGF	03/30/15 09:03	U
SM 2510 B	**Specific conductance**	414	µmhos/cm	5.00			W513183	RS	03/27/15 07:55	
SM 2540 C	**Total Diss. Solids**	280	mg/L	10			W513189	RS	03/27/15 09:20	
SM 4500 H B	**pH @20.0°C**	7.83	pH Units				W513204	AGF	03/30/15 09:03	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W514086	VRH	04/01/15 11:52	U
SM 4500-P-E	**Orthophosphate as P**	0.009	mg/L	0.010	0.004		W513165	MCB	03/26/15 13:18	J
SM 4500-S-F	**Sulfide**	0.32	mg/L	1.00	0.27		W514054	SM	04/01/15 17:22	J
SM 5310B	**Total Organic Carbon**	0.39	mg/L	1.00	0.24		W514165	SM	04/06/15 10:46	J

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Client Sample ID: **NSH-020-032515**
SVL Sample ID: **W5C0430-01 (Water)**

Sample Report Page 2 of 2

Sampled: 25-Mar-15 14:00
Received: 26-Mar-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	17.6	mg/L	5.00	1.40	25	W513175	JMW	03/26/15 12:05	D2
EPA 300.0	**Fluoride**	1.71	mg/L	0.100	0.022		W513175	JMW	03/26/15 11:54	
EPA 300.0	**Nitrate as N**	1.82	mg/L	0.050	0.008		W513175	JMW	03/26/15 11:54	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W513175	JMW	03/26/15 11:54	U
EPA 300.0	**Sulfate as SO4**	16.9	mg/L	0.30	0.05		W513175	JMW	03/26/15 11:54	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.34 meq/L Anion Sum: 4.51 meq/L C/A Balance: -1.94 % Calculated TDS: 263 TDS/cTDS: 1.07 TDS/eC: 0.68

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W514044	06-Apr-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W514044	06-Apr-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W514044	06-Apr-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W514044	06-Apr-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W514044	06-Apr-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W514044	06-Apr-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W514044	06-Apr-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W514021	07-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W514021	07-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W514021	07-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W514021	07-Apr-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W514021	07-Apr-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W514021	07-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W514021	07-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W514021	07-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W514021	07-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W514021	07-Apr-15	U
EPA 200.8	Manganese	mg/L	0.000025	0.000025	0.00100	W514021	07-Apr-15	J
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W514021	07-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W514021	07-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W514021	07-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W514021	07-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W514021	07-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W514021	07-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W514021	07-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W514021	07-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W513223	03-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.20		1.0	W513204	30-Mar-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.20		1.0	W513204	30-Mar-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W513204	30-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W513204	30-Mar-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W513189	27-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W514086	01-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.004	0.004	0.010	W513165	26-Mar-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W514054	01-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W514165	03-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W513175	26-Mar-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W513175	26-Mar-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W513175	26-Mar-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W513175	26-Mar-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W513175	26-Mar-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.94	1.00	93.6	85 - 115	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	19.2	20.0	96.0	85 - 115	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	8.94	10.0	89.4	85 - 115	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	18.4	20.0	92.0	85 - 115	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	19.0	20.0	95.2	85 - 115	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	9.99	10.7	93.3	85 - 115	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	17.3	19.0	90.9	85 - 115	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0236	0.0250	94.5	85 - 115	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0268	0.0250	107	85 - 115	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0246	0.0250	98.4	85 - 115	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0254	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0264	0.0250	106	85 - 115	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0254	0.0250	102	85 - 115	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0260	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0258	0.0250	103	85 - 115	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0259	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0249	0.0250	99.6	85 - 115	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0260	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0245	0.0250	97.9	85 - 115	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0270	0.0250	108	85 - 115	W514021	07-Apr-15	
EPA 200.8	Silver	mg/L	0.0253	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0250	100	85 - 115	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0257	0.0250	103	85 - 115	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0253	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.0274	0.0250	110	85 - 115	W514021	07-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00471	0.00500	94.2	85 - 115	W513223	03-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.6	99.3	97.3	85 - 115	W513204	30-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.6	99.3	97.3	85 - 115	W513204	30-Mar-15	
SM 2510 B	Specific conductance	µmhos/cm	297	306	97.1	90 - 110	W513183	27-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.156	0.150	104	90 - 110	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.841	0.786	107	90 - 110	W513165	26-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.29	2.50	91.6	80 - 120	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	36.7	34.3	107	90 - 110	W514165	06-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.87	3.00	95.7	90 - 110	W513175	26-Mar-15	
EPA 300.0	Fluoride	mg/L	1.99	2.00	99.3	90 - 110	W513175	26-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.02	2.01	101	90 - 110	W513175	26-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.73	2.51	109	90 - 110	W513175	26-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	10.2	10.0	102	90 - 110	W513175	26-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	175	172	1.3	20	W513204	30-Mar-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	175	172	1.3	20	W513204	30-Mar-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W513204	30-Mar-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W513204	30-Mar-15	U
SM 2510 B	Specific conductance	µmhos/cm	412	414	0.5	20	W513183	27-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	337	339	0.6	10	W513189	27-Mar-15	
SM 4500 H B	pH	pH Units	7.84	7.83	0.1	20	W513204	30-Mar-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W514044	06-Apr-15	
EPA 200.7	Aluminum	mg/L	1.00	<0.036	1.00	100	70 - 130	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	97.1	78.1	20.0	95.1	70 - 130	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	80.9	63.1	20.0	89.1	70 - 130	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.65	<0.026	10.0	96.5	70 - 130	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.30	<0.026	10.0	93.0	70 - 130	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	61.4	41.9	20.0	97.5	70 - 130	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	29.1	9.61	20.0	97.6	70 - 130	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	22.5	1.35	20.0	106	70 - 130	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	22.3	2.04	20.0	101	70 - 130	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	27.2	16.1	10.7	103	70 - 130	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	44.0	34.5	10.7	89.2	70 - 130	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	22.9	3.95	19.0	99.8	70 - 130	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	69.1	52.4	19.0	88.1	70 - 130	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0247	0.00033	0.0250	97.3	70 - 130	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0296	0.00056	0.0250	116	70 - 130	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0965	0.0681	0.0250	113	70 - 130	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0260	0.00013	0.0250	103	70 - 130	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0550	0.0366	0.0250	73.9	70 - 130	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0252	<0.000072	0.0250	101	70 - 130	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0270	0.0041	0.0250	91.8	70 - 130	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0249	0.00020	0.0250	98.8	70 - 130	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0307	0.00608	0.0250	98.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0234	0.00028	0.0250	92.4	70 - 130	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0592	0.0374	0.0250	87.2	70 - 130	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0500	0.0243	0.0250	103	70 - 130	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0267	0.0020	0.0250	98.7	70 - 130	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0317	0.0020	0.0250	119	70 - 130	W514021	07-Apr-15	
EPA 200.8	Silver	mg/L	0.0238	<0.000021	0.0250	95.3	70 - 130	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0236	<0.000026	0.0250	94.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0254	0.00178	0.0250	94.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0285	0.0032	0.0250	101	70 - 130	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.483	0.453	0.0250	123	70 - 130	W514021	07-Apr-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00094	<0.00004	0.00100	93.9	70 - 130	W513223	03-Apr-15	
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W513223	03-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.106	<0.0025	0.100	106	75 - 125	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.505	0.009	0.500	99.2	75 - 125	W513165	26-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-S-F	Sulfide	mg/L	2.57	0.32	2.50	90.0	80 - 120	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	50.2	1.54	50.0	97.3	80 - 120	W514165	06-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	16.3	14.0	3.00	R > 4S	90 - 110	W513175	26-Mar-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.25	0.139	2.00	106	90 - 110	W513175	26-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.62	0.440	2.00	109	90 - 110	W513175	26-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.17	<0.014	2.00	109	90 - 110	W513175	26-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	31.2	19.7	10.0	116	90 - 110	W513175	26-Mar-15	M1

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.01	1.04	1.00	101	3.1	20	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	96.4	97.1	20.0	91.7	0.7	20	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.48	9.65	10.0	94.8	1.8	20	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	61.1	61.4	20.0	96.0	0.5	20	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	21.9	22.5	20.0	103	2.5	20	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	26.7	27.2	10.7	99.3	1.6	20	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	22.5	22.9	19.0	97.5	1.9	20	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0250	0.0247	0.0250	98.7	1.4	20	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.0296	0.0250	119	2.2	20	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0926	0.0965	0.0250	97.8	4.2	20	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.0260	0.0250	105	1.2	20	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0576	0.0550	0.0250	84.2	4.6	20	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0256	0.0252	0.0250	102	1.6	20	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0280	0.0270	0.0250	95.6	3.4	20	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0239	0.0249	0.0250	94.7	4.2	20	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0298	0.0307	0.0250	95.1	2.9	20	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0240	0.0234	0.0250	94.9	2.6	20	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0575	0.0592	0.0250	80.4	2.9	20	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0507	0.0500	0.0250	106	1.5	20	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0255	0.0267	0.0250	94.0	4.5	20	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0353	0.0317	0.0250	133	11.0	20	W514021	07-Apr-15	M1
EPA 200.8	Silver	mg/L	0.0240	0.0238	0.0250	95.9	0.6	20	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0236	0.0236	0.0250	94.2	0.2	20	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0268	0.0254	0.0250	100	5.4	20	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0289	0.0285	0.0250	103	1.4	20	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.487	0.483	0.0250	R > 4S	0.8	20	W514021	07-Apr-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00097	0.00094	0.00100	97.0	3.2	20	W513223	03-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.106	0.100	103	2.9	20	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.499	0.505	0.500	98.0	1.2	20	W513165	26-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.61	2.57	2.50	91.6	1.6	20	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	50.8	50.2	50.0	98.5	1.1	20	W514165	06-Apr-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0430**
Reported: 24-Apr-15 13:20

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	16.2	16.3	3.00	R > 4S	0.6	20	W513175	26-Mar-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.26	2.25	2.00	106	0.4	20	W513175	26-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.63	2.62	2.00	109	0.3	20	W513175	26-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.20	2.17	2.00	110	1.2	20	W513175	26-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	31.3	31.2	10.0	116	0.2	20	W513175	26-Mar-15	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	NSH-015-032615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0452-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloroethane	0.96	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	4/2/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Benzene	4.56	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	NSH-015-032615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0452-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	NSH-015-032615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0452-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Toluene	0.71	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150331026-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.4	70-130
Bromofluorobenzene	EPA 524.3	97.0	70-130
Toluene-d8	EPA 524.3	97.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001A	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015	10:15 AM
Client Sample ID	NSH-015-032615 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5C0452-01			
Comments	Sample analysis duplicate per client request					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloroethane	0.91	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	4/2/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Benzene	4.40	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001A	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	NSH-015-032615 DUPLICATE	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5C0452-01		
Comments	Sample analysis duplicate per client request				

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001A	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015	10:15 AM
Client Sample ID	NSH-015-032615 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5C0452-01			
Comments	Sample analysis duplicate per client request					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Toluene	0.74	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150331026-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.2	70-130
Bromofluorobenzene	EPA 524.3	98.2	70-130
Toluene-d8	EPA 524.3	94.2	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-002	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0452-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Acetone	2.73	ug/L	2.5	4/2/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-002	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0452-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-002	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5C0452-02		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	4/2/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150331026-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	94.2	70-130
Bromofluorobenzene	EPA 524.3	97.2	70-130
Toluene-d8	EPA 524.3	98.0	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.1	ug/L	10	101.0	70-130	4/2/2015	4/2/2015
Toluene	9.61	ug/L	10	96.1	70-130	4/2/2015	4/2/2015
Tetrachloroethene	10.1	ug/L	10	101.0	70-130	4/2/2015	4/2/2015
o-Xylene	8.87	ug/L	10	88.7	70-130	4/2/2015	4/2/2015
Ethylbenzene	8.84	ug/L	10	88.4	70-130	4/2/2015	4/2/2015
Chlorobenzene	9.69	ug/L	10	96.9	70-130	4/2/2015	4/2/2015
Benzene	9.88	ug/L	10	98.8	70-130	4/2/2015	4/2/2015
1,1-Dichloroethene	9.96	ug/L	10	99.6	70-130	4/2/2015	4/2/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.4	ug/L	10	104.0	2.9	0-25	4/2/2015	4/2/2015
Toluene	9.71	ug/L	10	97.1	1.0	0-25	4/2/2015	4/2/2015
Tetrachloroethene	10.3	ug/L	10	103.0	2.0	0-25	4/2/2015	4/2/2015
o-Xylene	9.43	ug/L	10	94.3	6.1	0-25	4/2/2015	4/2/2015
Ethylbenzene	9.61	ug/L	10	96.1	8.3	0-25	4/2/2015	4/2/2015
Chlorobenzene	10.1	ug/L	10	101.0	4.1	0-25	4/2/2015	4/2/2015
Benzene	9.67	ug/L	10	96.7	2.1	0-25	4/2/2015	4/2/2015
1,1-Dichloroethene	9.62	ug/L	10	96.2	3.5	0-25	4/2/2015	4/2/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150326034-001	Trichloroethene	ND	9.89	ug/L	10	98.9	70-130	4/2/2015	4/2/2015
150326034-001	Toluene	ND	10.2	ug/L	10	102.0	70-130	4/2/2015	4/2/2015
150326034-001	Tetrachloroethene	ND	8.69	ug/L	10	86.9	70-130	4/2/2015	4/2/2015
150326034-001	o-Xylene	ND	9.91	ug/L	10	99.1	70-130	4/2/2015	4/2/2015
150326034-001	Ethylbenzene	ND	9.74	ug/L	10	97.4	70-130	4/2/2015	4/2/2015
150326034-001	Chlorobenzene	ND	10.3	ug/L	10	103.0	70-130	4/2/2015	4/2/2015
150326034-001	Benzene	ND	9.69	ug/L	10	96.9	70-130	4/2/2015	4/2/2015
150326034-001	1,1-Dichloroethene	ND	10.1	ug/L	10	101.0	70-130	4/2/2015	4/2/2015

Method Blank

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Quality Control Data

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,1-dichloropropene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/2/2015	4/2/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/2/2015	4/2/2015
2-Chlorotoluene	ND	ug/L	0.5	4/2/2015	4/2/2015
4-Chlorotoluene	ND	ug/L	0.5	4/2/2015	4/2/2015
Acetone	ND	ug/L	2.5	4/2/2015	4/2/2015
Benzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Bromobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Bromochloromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Bromodichloromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Bromoform	ND	ug/L	0.5	4/2/2015	4/2/2015
Bromomethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/2/2015	4/2/2015
Chlorobenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Chloroethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Chloroform	ND	ug/L	0.5	4/2/2015	4/2/2015
Chloromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/2/2015	4/2/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	4/2/2015
Dibromochloromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Dibromomethane	ND	ug/L	0.5	4/2/2015	4/2/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Quality Control Data

Method Blank

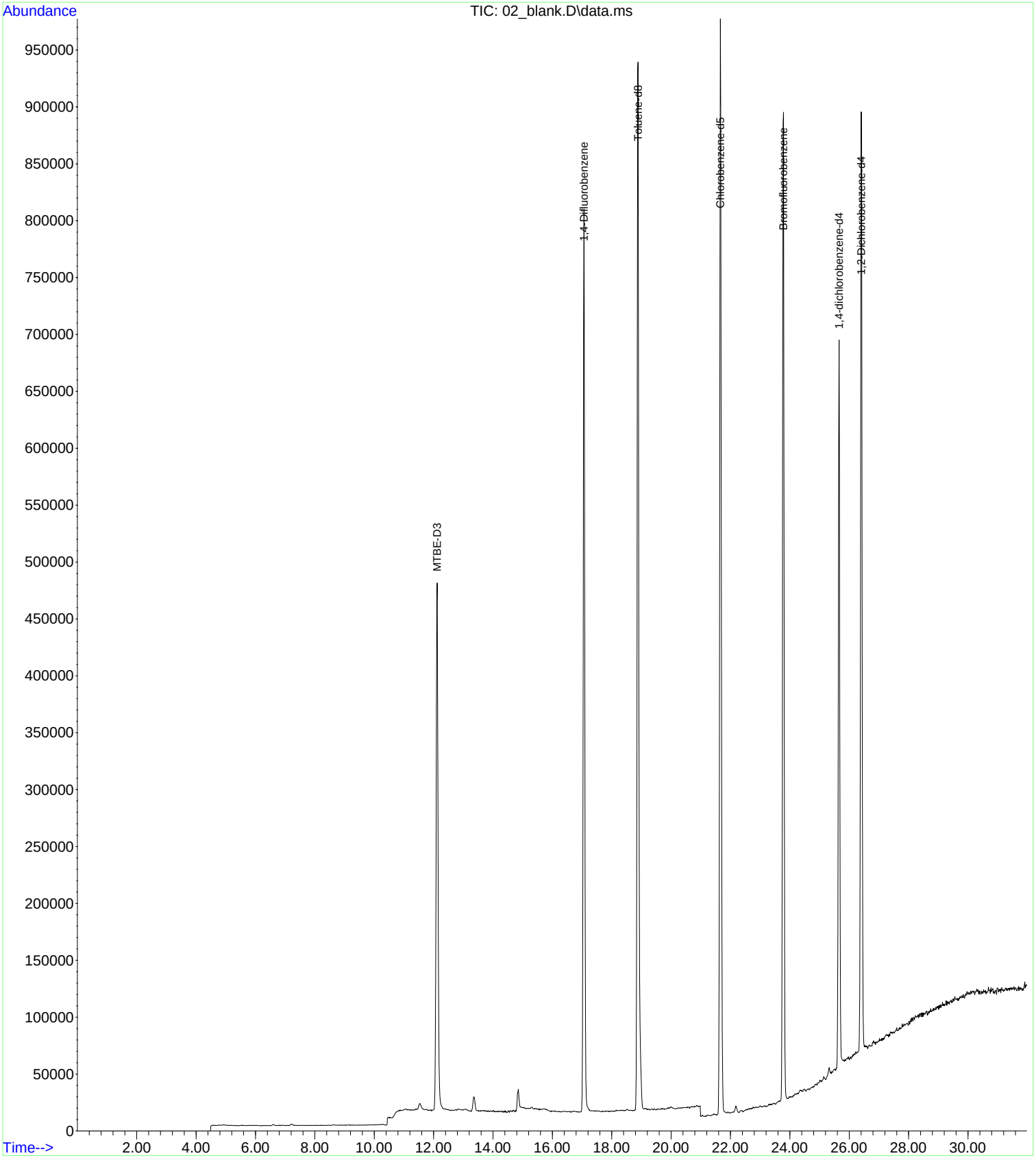
Parameter	Result	Units	PQL	Prep Date	Analysis Date
Dichlorodifluoromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Ethylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/2/2015	4/2/2015
Isopropylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
m+p-Xylene	ND	ug/L	0.5	4/2/2015	4/2/2015
Methylene chloride	ND	ug/L	0.5	4/2/2015	4/2/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/2/2015	4/2/2015
Naphthalene	ND	ug/L	0.5	4/2/2015	4/2/2015
n-Butylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
n-Propylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
o-Xylene	ND	ug/L	0.5	4/2/2015	4/2/2015
p-isopropyltoluene	ND	ug/L	0.5	4/2/2015	4/2/2015
sec-Butylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Styrene	ND	ug/L	0.5	4/2/2015	4/2/2015
tert-Butylbenzene	ND	ug/L	0.5	4/2/2015	4/2/2015
Tetrachloroethene	ND	ug/L	0.5	4/2/2015	4/2/2015
Toluene	ND	ug/L	0.5	4/2/2015	4/2/2015
Total Xylene	ND	ug/L	0.5	4/2/2015	4/2/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/2/2015	4/2/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/2/2015	4/2/2015
Trichloroethene	ND	ug/L	0.5	4/2/2015	4/2/2015
Trichlorofluoromethane	ND	ug/L	0.5	4/2/2015	4/2/2015
Vinyl Chloride	ND	ug/L	0.5	4/2/2015	4/2/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

File :T:\Data2\Voc\Saturn2100\2015 DATA\APR\02\02_blank.D
Operator : SAT
Acquired : 02 Apr 2015 09:46 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 02 BLANK
Misc Info :
Vial Number: 0



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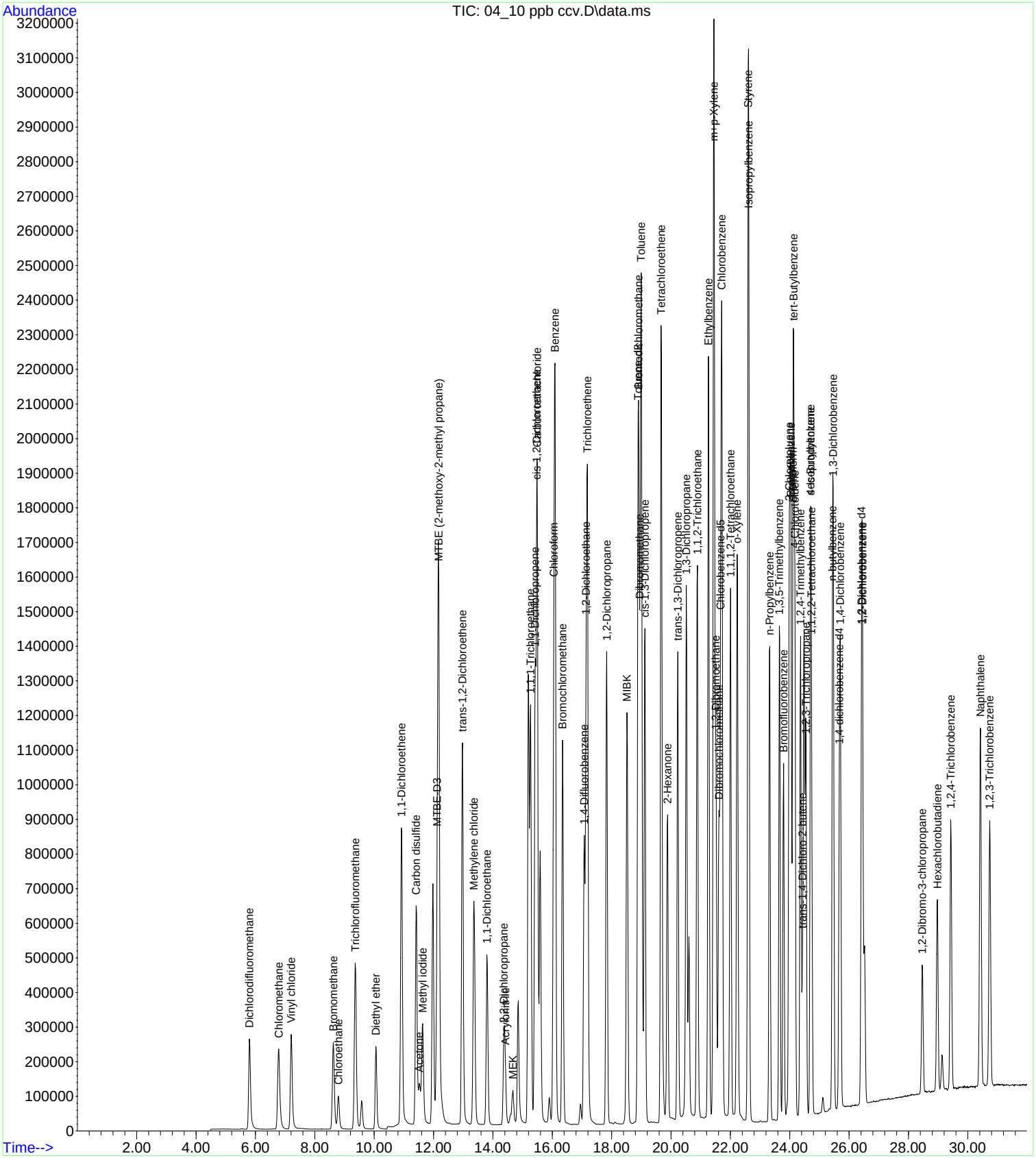
Acquired : 02 Apr 2015 11:05 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 04 10 PPB CCV
Misc Info :
Vial Number: 0



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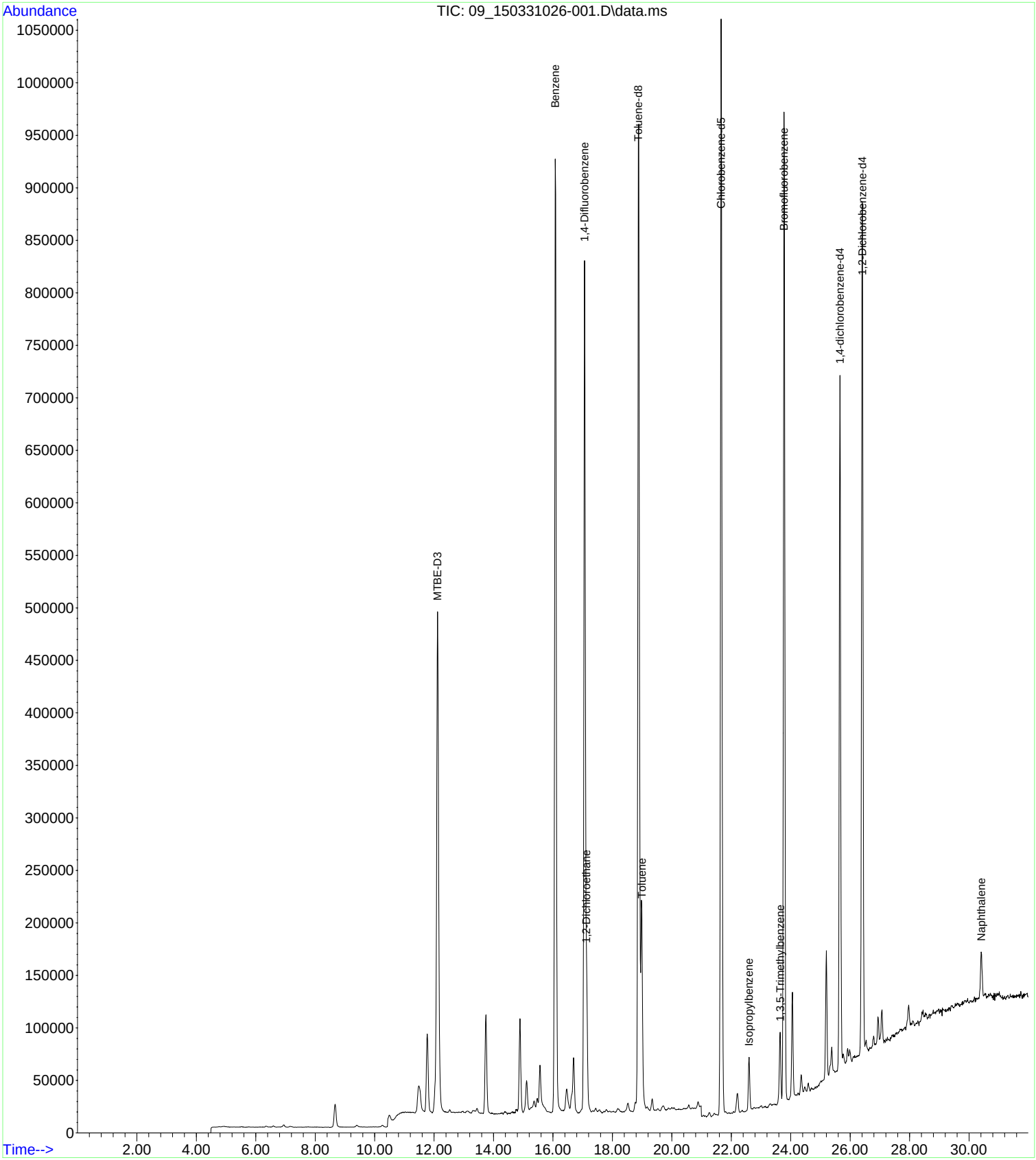
Instrument : Saturn 2100
Sample Name: 09 150331026-001
Misc Info :
Vial Number: 0



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Operator : SAT
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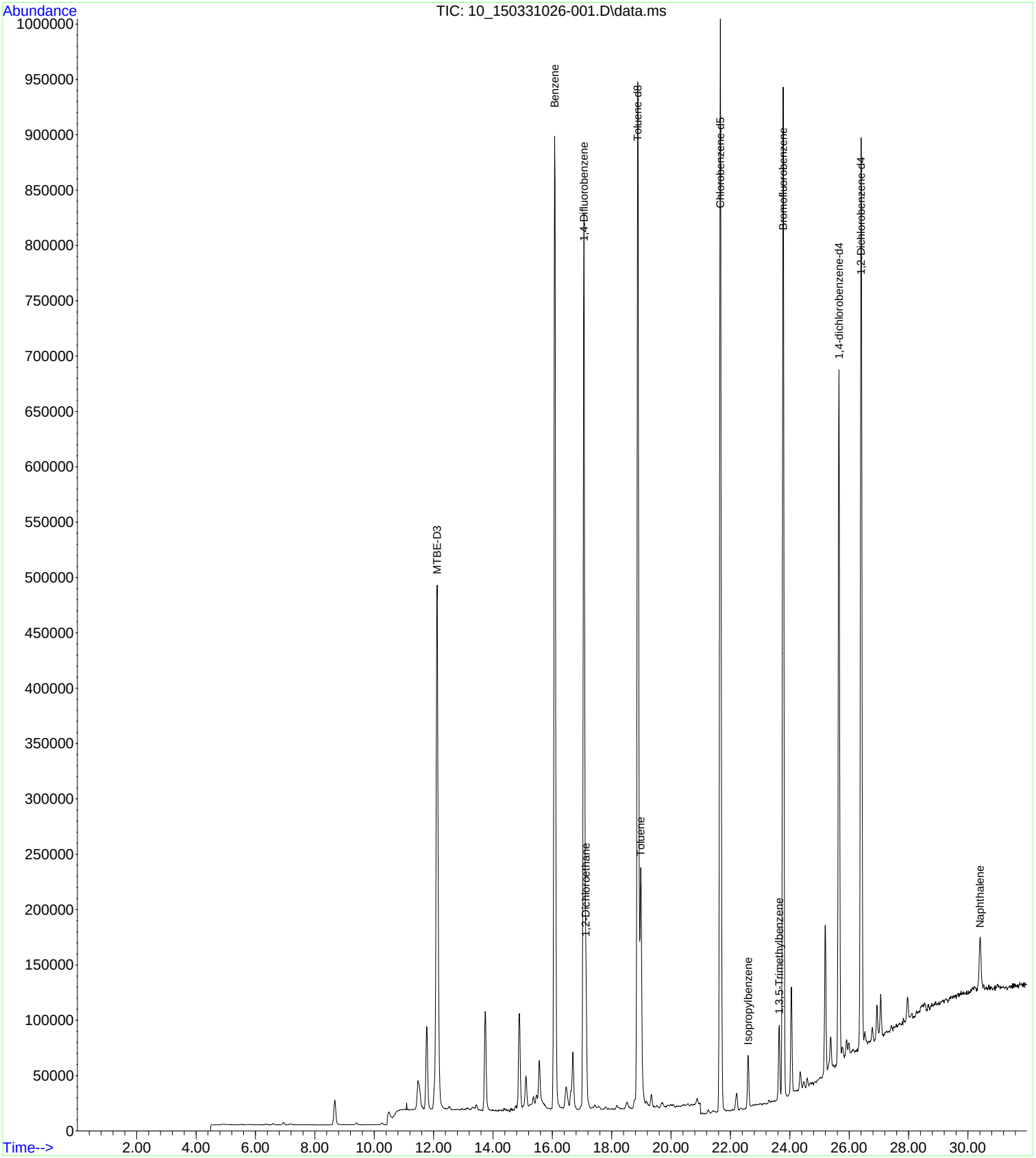
Misc Info : DUPLICATE
Vial Number: 0



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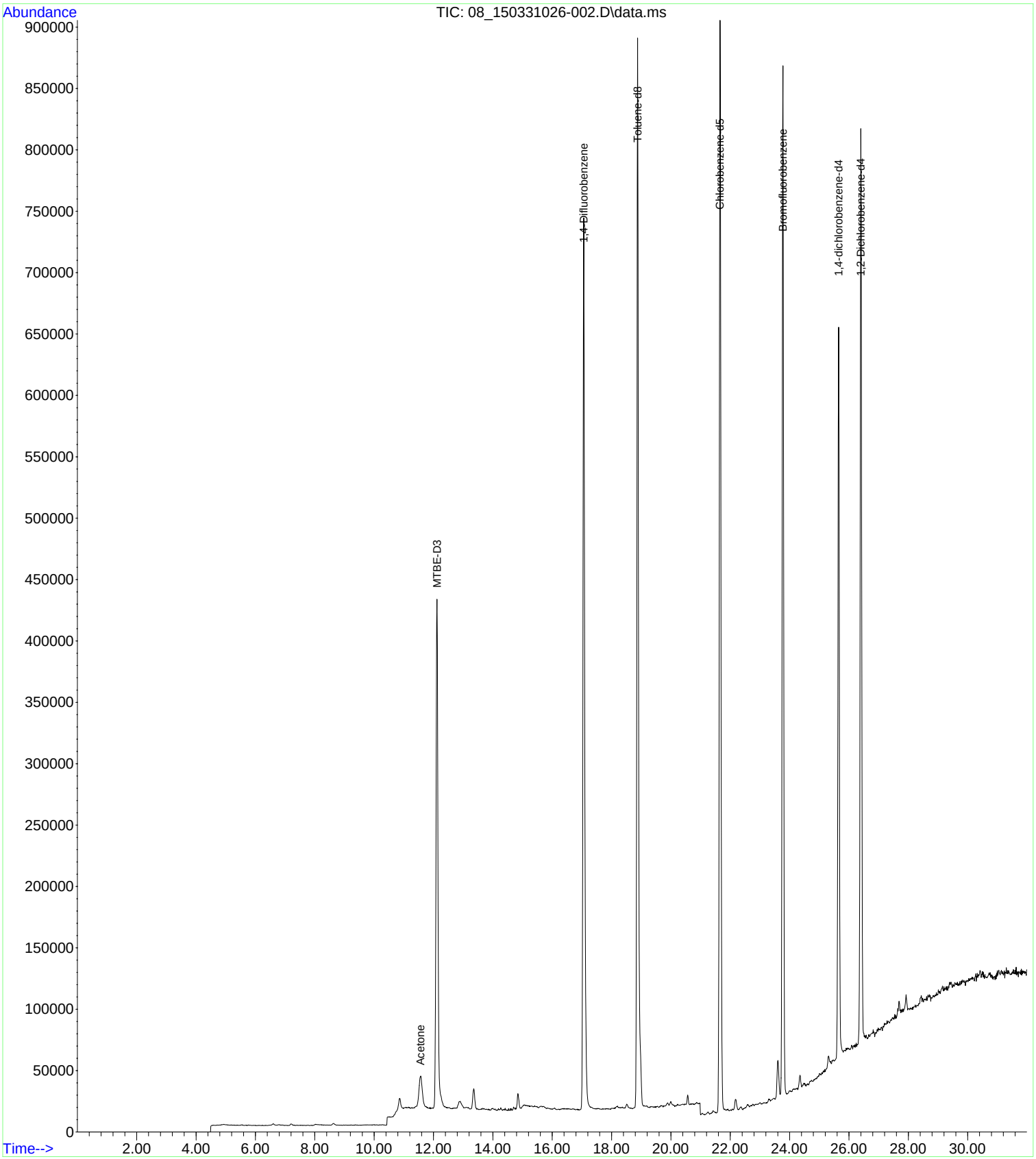
Acquired : 02 Apr 15 13:44 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 08 150331026-002
Misc Info :
Vial Number: 0



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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Sample Number	150331026-001	**Sampling Date**	3/26/2015	**Date/Time Received**	3/31/2015 10:15 AM
Client Sample ID	NSH-015-032615	**Sampling Time**	2:00 PM	**Extraction Date**	4/2/15
Matrix	Water	**Sample Location**	W5C0452-01		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	0.0262	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Naphthalene	0.268	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.01	4/6/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150331026-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	97.3	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.56	ug/L	5	71.2	62-139	4/2/2015	4/6/2015
Acenaphthene	3.52	ug/L	5	70.4	70-135	4/2/2015	4/6/2015
Acenaphthylene	3.58	ug/L	5	71.6	69-121	4/2/2015	4/6/2015
Anthracene	3.55	ug/L	5	71.0	63-113	4/2/2015	4/6/2015
Benzo(ghi)perylene	3.87	ug/L	5	77.4	71-141	4/2/2015	4/6/2015
Benzo[a]anthracene	4.05	ug/L	5	81.0	71-142	4/2/2015	4/6/2015
Benzo[a]pyrene	3.76	ug/L	5	75.2	71-143	4/2/2015	4/6/2015
2-Methylnaphthalene	3.88	ug/L	5	77.6	56-128	4/2/2015	4/6/2015
Benzo[k]fluoranthene	3.70	ug/L	5	74.0	69-149	4/2/2015	4/6/2015
Pyrene	3.66	ug/L	5	73.2	69-119	4/2/2015	4/6/2015
Dibenz[a,h]anthracene	3.96	ug/L	5	79.2	68-138	4/2/2015	4/6/2015
Fluoranthene	3.68	ug/L	5	73.6	67-120	4/2/2015	4/6/2015
Fluorene	3.64	ug/L	5	72.8	60-116	4/2/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	3.90	ug/L	5	78.0	68-140	4/2/2015	4/6/2015
Naphthalene	3.54	ug/L	5	70.8	51-122	4/2/2015	4/6/2015
Phenanthrene	3.67	ug/L	5	73.4	71-126	4/2/2015	4/6/2015
Benzo[b]fluoranthene	3.99	ug/L	5	79.8	68-148	4/2/2015	4/6/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.57	ug/L	5	71.4	0.3	0-50	4/2/2015	4/6/2015
Acenaphthene	3.59	ug/L	5	71.8	2.0	0-50	4/2/2015	4/6/2015
Acenaphthylene	3.66	ug/L	5	73.2	2.2	0-50	4/2/2015	4/6/2015
Anthracene	3.51	ug/L	5	70.2	1.1	0-50	4/2/2015	4/6/2015
Benzo(ghi)perylene	3.80	ug/L	5	76.0	1.8	0-50	4/2/2015	4/6/2015
Benzo[a]anthracene	4.06	ug/L	5	81.2	0.2	0-50	4/2/2015	4/6/2015
Benzo[a]pyrene	3.76	ug/L	5	75.2	0.0	0-50	4/2/2015	4/6/2015
2-Methylnaphthalene	4.16	ug/L	5	83.2	7.0	0-50	4/2/2015	4/6/2015
Benzo[k]fluoranthene	3.64	ug/L	5	72.8	1.6	0-50	4/2/2015	4/6/2015
Pyrene	3.56	ug/L	5	71.2	2.8	0-50	4/2/2015	4/6/2015
Dibenz[a,h]anthracene	3.92	ug/L	5	78.4	1.0	0-50	4/2/2015	4/6/2015
Fluoranthene	3.60	ug/L	5	72.0	2.2	0-50	4/2/2015	4/6/2015
Fluorene	3.68	ug/L	5	73.6	1.1	0-50	4/2/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	3.89	ug/L	5	77.8	0.3	0-50	4/2/2015	4/6/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150331026
Project Name: SVL #W5C0452

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.75	ug/L	5	75.0	5.8	0-50	4/2/2015	4/6/2015
Phenanthrene	3.604	ug/L	5	72.1	1.8	0-50	4/2/2015	4/6/2015
Benzo[b]fluoranthene	4.07	ug/L	5	81.4	2.0	0-50	4/2/2015	4/6/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/2/2015	4/6/2015
Acenaphthene	ND	ug/L	0.01	4/2/2015	4/6/2015
Acenaphthylene	ND	ug/L	0.01	4/2/2015	4/6/2015
Anthracene	ND	ug/L	0.01	4/2/2015	4/6/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/2/2015	4/6/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/2/2015	4/6/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/2/2015	4/6/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/2/2015	4/6/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/2/2015	4/6/2015
Chrysene	ND	ug/L	0.01	4/2/2015	4/6/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/2/2015	4/6/2015
Fluoranthene	ND	ug/L	0.01	4/2/2015	4/6/2015
Fluorene	ND	ug/L	0.01	4/2/2015	4/6/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/2/2015	4/6/2015
Naphthalene	ND	ug/L	0.01	4/2/2015	4/6/2015
Phenanthrene	ND	ug/L	0.01	4/2/2015	4/6/2015
Pyrene	ND	ug/L	0.01	4/2/2015	4/6/2015

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150331026
Order Date: 3/31/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5C0452
Comment:

Sample #: 150331026-001 **Customer Sample #:** NSH-015-032615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/26/2015
Quantity: 4 **Date Received:** 3/31/2015 10:15:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	4/10/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	4/10/2015	***Normal (~10 Days)***

Sample #: 150331026-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 3/26/2015
Quantity: 1 **Date Received:** 3/31/2015 10:15:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	4/10/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	1.3
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

WSC0452

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 1.2

Page ____ of ____

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY AND ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E. VAN BUREN ST SUITE 545, PHOENIX AZ
Phone Number: 602-760-2450 85004
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: GUNNISON COPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N. 44TH ST SUITE 300, PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other: ____

Project Name: EXCELSIOR
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC	PAH	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-015-032615	3/26/15	1400	[illegible]	2	15								X	X	X	X	X	X	X	X	X	X	X		METALS AND SILICA SAMPLE WAS FIELD FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE THEN PRESERVED WITH HNO_3.
2																										
3	TRIP BLANK					1																	X			
4																										
5																										
6																										
7																										SHIPPER UPS TRACKING: 1Z 9X8 989 23 1001 255 1
8																										
9																										
10																										

Relinquished by: [signature]	Date: 3/26/15	Time: 1500	Received by: [signature]	Date: 3/26/15	Time: 1500
Relinquished by: S Jackson	Date: 3-30-15	Time: 1233	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-015-032615	W5C0452-01	Water	26-Mar-15 14:00	JN	27-Mar-2015	
TRIP BLANK	W5C0452-02	Water	26-Mar-15 00:00	JN	27-Mar-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Client Sample ID: **NSH-015-032615**
SVL Sample ID: **W5C0452-01 (Water)**

Sampled: 26-Mar-15 14:00
Received: 27-Mar-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W514044	AS	04/06/15 17:43	U
EPA 200.7	**Calcium**	63.1	mg/L	0.040	0.029		W514044	AS	04/06/15 18:23	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W514044	AS	04/06/15 17:43	U
EPA 200.7	**Magnesium**	9.61	mg/L	0.20	0.11		W514044	AS	04/06/15 18:23	
EPA 200.7	**Potassium**	2.04	mg/L	0.50	0.17		W514044	AS	04/06/15 17:43	
EPA 200.7	**Silica (SiO2)**	34.5	mg/L	0.17	0.12		W514044	AS	04/06/15 17:43	
EPA 200.7	**Sodium**	52.4	mg/L	0.50	0.05		W514044	AS	04/06/15 17:43	
EPA 200.8	**Antimony**	0.00062	mg/L	0.00300	0.00019		W514021	KWH	04/07/15 10:39	J
EPA 200.8	**Arsenic**	0.00143	mg/L	0.00300	0.00027		W514021	KWH	04/07/15 12:34	J
EPA 200.8	**Barium**	0.370	mg/L	0.00100	0.000099		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Beryllium**	0.00021	mg/L	0.00020	0.000048		W514021	KWH	04/07/15 12:34	
EPA 200.8	**Boron**	0.0432	mg/L	0.0050	0.0012		W514021	KWH	04/07/15 10:39	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W514021	KWH	04/07/15 10:39	U
EPA 200.8	**Chromium**	0.0049	mg/L	0.0015	0.0004		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Cobalt**	0.00012	mg/L	0.00100	0.000054		W514021	KWH	04/07/15 10:39	J
EPA 200.8	**Copper**	0.00994	mg/L	0.00100	0.00015		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Lead**	0.00015	mg/L	0.00300	0.000031		W514021	KWH	04/07/15 10:39	J
EPA 200.8	**Manganese**	0.000447	mg/L	0.00100	0.000025		W514021	KWH	04/07/15 10:39	J
EPA 200.8	**Molybdenum**	0.00755	mg/L	0.00100	0.00009		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Nickel**	0.0021	mg/L	0.0010	0.0004		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Selenium**	0.0026	mg/L	0.0030	0.0006		W514021	KWH	04/07/15 10:39	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W514021	KWH	04/07/15 10:39	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W514021	KWH	04/07/15 10:39	U
EPA 200.8	**Uranium**	0.00349	mg/L	0.00100	0.000014		W514021	KWH	04/07/15 10:39	
EPA 200.8	**Vanadium**	0.0033	mg/L	0.0030	0.0009		W514021	KWH	04/07/15 12:34	
EPA 200.8	**Zinc**	0.550	mg/L	0.0050	0.0010		W514021	KWH	04/07/15 10:39	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W513223	STA	04/03/15 11:21	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	207	mg/L as CaCO3	1.0			W514098	DKS	04/01/15 12:12	
SM 2320B	**Bicarbonate**	207	mg/L as CaCO3	1.0			W514098	DKS	04/01/15 12:12	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W514098	DKS	04/01/15 12:12	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W514098	DKS	04/01/15 12:12	U
SM 2510 B	**Specific conductance**	648	µmhos/cm	5.00			W514018	JDM	03/30/15 12:40	
SM 2540 C	**Total Diss. Solids**	372	mg/L	10			W513212	JDM	03/30/15 14:40	
SM 4500 H B	**pH @17.0°C**	8.20	pH Units				W514098	DKS	04/01/15 12:12	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W514086	VRH	04/01/15 11:56	U
SM 4500-P-E	**Orthophosphate as P**	0.012	mg/L	0.010	0.006		W513217	SM	03/27/15 14:37	Q14
SM 4500-S-F	Sulfide	< 0.27	mg/L	1.00	0.27		W514054	SM	04/01/15 17:22	U
SM 5310B	Total Organic Carbon	< 0.24	mg/L	1.00	0.24		W514165	SM	04/06/15 10:59	U

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Client Sample ID: **NSH-015-032615**
SVL Sample ID: **W5C0452-01 (Water)**

Sample Report Page 2 of 2

Sampled: 26-Mar-15 14:00
Received: 27-Mar-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	58.5	mg/L	5.00	1.40	25	W514091	JMW	03/27/15 12:57	D2
EPA 300.0	**Fluoride**	2.49	mg/L	0.100	0.022		W514091	JMW	03/27/15 12:45	
EPA 300.0	**Nitrate as N**	3.75	mg/L	0.050	0.008		W514091	JMW	03/27/15 12:45	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W514091	JMW	03/27/15 12:45	U
EPA 300.0	**Sulfate as SO4**	14.1	mg/L	0.30	0.05		W514091	JMW	03/27/15 12:45	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.30 meq/L Anion Sum: 6.48 meq/L C/A Balance: -1.42 % Calculated TDS: 378 TDS/cTDS: 0.99 TDS/eC: 0.57

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W514044	06-Apr-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W514044	06-Apr-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W514044	06-Apr-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W514044	06-Apr-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W514044	06-Apr-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W514044	06-Apr-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W514044	06-Apr-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W514021	07-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W514021	07-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W514021	07-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W514021	07-Apr-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W514021	07-Apr-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W514021	07-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W514021	07-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W514021	07-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W514021	07-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W514021	07-Apr-15	U
EPA 200.8	Manganese	mg/L	0.000025	0.000025	0.00100	W514021	07-Apr-15	J
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W514021	07-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W514021	07-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W514021	07-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W514021	07-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W514021	07-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W514021	07-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W514021	07-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W514021	07-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W513223	03-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.48		1.0	W514098	01-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.48		1.0	W514098	01-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W514098	01-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W514098	01-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W513212	30-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W514086	01-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W513217	27-Mar-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W514054	01-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W514165	03-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W514091	31-Mar-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W514091	31-Mar-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W514091	31-Mar-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W514091	31-Mar-15	U
EPA 300.0	Sulfate as SO4	mg/L	0.05	0.05	0.30	W514091	31-Mar-15	J

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.94	1.00	93.6	85 - 115	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	19.2	20.0	96.0	85 - 115	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	8.94	10.0	89.4	85 - 115	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	18.4	20.0	92.0	85 - 115	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	19.0	20.0	95.2	85 - 115	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	9.99	10.7	93.3	85 - 115	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	17.3	19.0	90.9	85 - 115	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0236	0.0250	94.5	85 - 115	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0268	0.0250	107	85 - 115	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0246	0.0250	98.4	85 - 115	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0254	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0264	0.0250	106	85 - 115	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0254	0.0250	102	85 - 115	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0260	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0258	0.0250	103	85 - 115	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0259	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0249	0.0250	99.6	85 - 115	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0260	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0245	0.0250	97.9	85 - 115	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0250	104	85 - 115	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0270	0.0250	108	85 - 115	W514021	07-Apr-15	
EPA 200.8	Silver	mg/L	0.0253	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0250	100	85 - 115	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0257	0.0250	103	85 - 115	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0253	0.0250	101	85 - 115	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.0274	0.0250	110	85 - 115	W514021	07-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00471	0.00500	94.2	85 - 115	W513223	03-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	97.2	99.3	97.9	85 - 115	W514098	01-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	97.2	99.3	97.9	85 - 115	W514098	01-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	299	306	97.7	90 - 110	W514018	30-Mar-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.156	0.150	104	90 - 110	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.793	0.786	101	90 - 110	W513217	27-Mar-15	
SM 4500-S-F	Sulfide	mg/L	2.29	2.50	91.6	80 - 120	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	36.7	34.3	107	90 - 110	W514165	06-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.90	3.00	96.6	90 - 110	W514091	31-Mar-15	
EPA 300.0	Fluoride	mg/L	1.99	2.00	99.3	90 - 110	W514091	31-Mar-15	
EPA 300.0	Nitrate as N	mg/L	2.02	2.01	101	90 - 110	W514091	31-Mar-15	
EPA 300.0	Nitrite as N	mg/L	2.67	2.51	106	90 - 110	W514091	31-Mar-15	
EPA 300.0	Sulfate as SO4	mg/L	10.0	10.0	100	90 - 110	W514091	31-Mar-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	204	207	1.3	20	W514098	01-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	204	207	1.3	20	W514098	01-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W514098	01-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W514098	01-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	637	648	1.8	20	W514018	30-Mar-15	
SM 2540 C	Total Diss. Solids	mg/L	389	372	4.5	10	W513212	30-Mar-15	
SM 4500 H B	pH	pH Units	8.22	8.20	0.2	20	W514098	01-Apr-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W514044	06-Apr-15	
EPA 200.7	Aluminum	mg/L	1.00	<0.036	1.00	100	70 - 130	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	97.1	78.1	20.0	95.1	70 - 130	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	80.9	63.1	20.0	89.1	70 - 130	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.65	<0.026	10.0	96.5	70 - 130	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.30	<0.026	10.0	93.0	70 - 130	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	61.4	41.9	20.0	97.5	70 - 130	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	29.1	9.61	20.0	97.6	70 - 130	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	22.5	1.35	20.0	106	70 - 130	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	22.3	2.04	20.0	101	70 - 130	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	27.2	16.1	10.7	103	70 - 130	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	44.0	34.5	10.7	89.2	70 - 130	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	22.9	3.95	19.0	99.8	70 - 130	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	69.1	52.4	19.0	88.1	70 - 130	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0247	0.00033	0.0250	97.3	70 - 130	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0296	0.00056	0.0250	116	70 - 130	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0965	0.0681	0.0250	113	70 - 130	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0260	0.00013	0.0250	103	70 - 130	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0550	0.0366	0.0250	73.9	70 - 130	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0252	<0.000072	0.0250	101	70 - 130	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0270	0.0041	0.0250	91.8	70 - 130	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0249	0.00020	0.0250	98.8	70 - 130	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0307	0.00608	0.0250	98.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0234	0.00028	0.0250	92.4	70 - 130	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0592	0.0374	0.0250	87.2	70 - 130	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0500	0.0243	0.0250	103	70 - 130	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0267	0.0020	0.0250	98.7	70 - 130	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0317	0.0020	0.0250	119	70 - 130	W514021	07-Apr-15	
EPA 200.8	Silver	mg/L	0.0238	<0.000021	0.0250	95.3	70 - 130	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0236	<0.000026	0.0250	94.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0254	0.00178	0.0250	94.5	70 - 130	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0285	0.0032	0.0250	101	70 - 130	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.483	0.453	0.0250	123	70 - 130	W514021	07-Apr-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00094	<0.00004	0.00100	93.9	70 - 130	W513223	03-Apr-15	
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W513223	03-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.106	<0.0025	0.100	106	75 - 125	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.504	0.012	0.500	98.5	75 - 125	W513217	27-Mar-15	Q14

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-S-F	Sulfide	mg/L	2.57	0.32	2.50	90.0	80 - 120	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	50.2	1.54	50.0	97.3	80 - 120	W514165	06-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	12.8	9.75	3.00	103	90 - 110	W514091	31-Mar-15	D2
EPA 300.0	Fluoride	mg/L	2.50	0.573	2.00	96.5	90 - 110	W514091	31-Mar-15	D1
EPA 300.0	Nitrate as N	mg/L	3.87	1.75	2.00	106	90 - 110	W514091	31-Mar-15	D1
EPA 300.0	Nitrite as N	mg/L	2.29	<0.07	2.00	115	90 - 110	W514091	31-Mar-15	D1,M1
EPA 300.0	Sulfate as SO4	mg/L	801	795	10.0	R > 4S	90 - 110	W514091	31-Mar-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.01	1.04	1.00	101	3.1	20	W514044	06-Apr-15	
EPA 200.7	Calcium	mg/L	96.4	97.1	20.0	91.7	0.7	20	W514044	06-Apr-15	
EPA 200.7	Iron	mg/L	9.48	9.65	10.0	94.8	1.8	20	W514044	06-Apr-15	
EPA 200.7	Magnesium	mg/L	61.1	61.4	20.0	96.0	0.5	20	W514044	06-Apr-15	
EPA 200.7	Potassium	mg/L	21.9	22.5	20.0	103	2.5	20	W514044	06-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	26.7	27.2	10.7	99.3	1.6	20	W514044	06-Apr-15	
EPA 200.7	Sodium	mg/L	22.5	22.9	19.0	97.5	1.9	20	W514044	06-Apr-15	
EPA 200.8	Antimony	mg/L	0.0250	0.0247	0.0250	98.7	1.4	20	W514021	07-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.0296	0.0250	119	2.2	20	W514021	07-Apr-15	
EPA 200.8	Barium	mg/L	0.0926	0.0965	0.0250	97.8	4.2	20	W514021	07-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.0260	0.0250	105	1.2	20	W514021	07-Apr-15	
EPA 200.8	Boron	mg/L	0.0576	0.0550	0.0250	84.2	4.6	20	W514021	07-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0256	0.0252	0.0250	102	1.6	20	W514021	07-Apr-15	
EPA 200.8	Chromium	mg/L	0.0280	0.0270	0.0250	95.6	3.4	20	W514021	07-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0239	0.0249	0.0250	94.7	4.2	20	W514021	07-Apr-15	
EPA 200.8	Copper	mg/L	0.0298	0.0307	0.0250	95.1	2.9	20	W514021	07-Apr-15	
EPA 200.8	Lead	mg/L	0.0240	0.0234	0.0250	94.9	2.6	20	W514021	07-Apr-15	
EPA 200.8	Manganese	mg/L	0.0575	0.0592	0.0250	80.4	2.9	20	W514021	07-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0507	0.0500	0.0250	106	1.5	20	W514021	07-Apr-15	
EPA 200.8	Nickel	mg/L	0.0255	0.0267	0.0250	94.0	4.5	20	W514021	07-Apr-15	
EPA 200.8	Selenium	mg/L	0.0353	0.0317	0.0250	133	11.0	20	W514021	07-Apr-15	M1
EPA 200.8	Silver	mg/L	0.0240	0.0238	0.0250	95.9	0.6	20	W514021	07-Apr-15	
EPA 200.8	Thallium	mg/L	0.0236	0.0236	0.0250	94.2	0.2	20	W514021	07-Apr-15	
EPA 200.8	Uranium	mg/L	0.0268	0.0254	0.0250	100	5.4	20	W514021	07-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0289	0.0285	0.0250	103	1.4	20	W514021	07-Apr-15	
EPA 200.8	Zinc	mg/L	0.487	0.483	0.0250	R > 4S	0.8	20	W514021	07-Apr-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00097	0.00094	0.00100	97.0	3.2	20	W513223	03-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.106	0.100	103	2.9	20	W514086	01-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.500	0.504	0.500	97.6	0.9	20	W513217	27-Mar-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.61	2.57	2.50	91.6	1.6	20	W514054	01-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	50.8	50.2	50.0	98.5	1.1	20	W514165	06-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5C0452**
Reported: 24-Apr-15 14:10

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	12.6	12.8	3.00	94.4	2.0	20	W514091	31-Mar-15	D2
EPA 300.0	Fluoride	mg/L	2.44	2.50	2.00	93.4	2.5	20	W514091	31-Mar-15	D1
EPA 300.0	Nitrate as N	mg/L	3.91	3.87	2.00	108	0.9	20	W514091	31-Mar-15	D1
EPA 300.0	Nitrite as N	mg/L	2.17	2.29	2.00	109	5.4	20	W514091	31-Mar-15	D1
EPA 300.0	Sulfate as SO4	mg/L	779	801	10.0	R > 4S	2.8	20	W514091	31-Mar-15	D2,M3

Notes and Definitions

D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

Wednesday, May 06, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504187
Project Name:
Project Number: 5D0067

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/9/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504187

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met with the following exception:

Uranium-235 and -238 activities are reported in the associated method blank above the minimum detectable concentration value. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504187
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0067
Client PO Number: 15201

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-022-040215	1504187-1		WATER	02-Apr-15	14:00

ALS

1504187

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5D0067

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
1 Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAME
Address:
Phone Number:
FAX Number:
PO#: 15201

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross A/B 900.0	RAD226/228 903.1/904	U 234/235/238	ASTM D3972	Rush Instructions (Days)	Comments
1	NSH-022-040215	4/2/15	1400	CG	2	3			X					X	X	X	X		
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
A Jacobson	4-6-15	1105	Eirfeh	4/9/15	1005
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1504187

Project Manager: JRK Initials: ECP Date: 4/9/15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-9-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

1504187

12 LBS 1 OF 1

DWT: 14,11,16

S: BROWN

P: RED

RICK - 3440

1072

1Z9X8989034557

COMMERCE DR

FORT COLLINS CO 80524

ALS

225

0524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4557 1072

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31 60.0A 01/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited. RRD R 1114

SVL ANAL (208

Client:	SVL Analytical	**Date:**	*06-May-15*
Project:	5D0067	**Work Order:**	1504187
Sample ID:	NSH-022-040215	**Lab ID:**	1504187-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/2/2015 14:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **4/15/2015**	PrepBy: **DKL**
GROSS ALPHA	**3.41 (+/- 0.93)**		**0.95**	**pCi/l**	NA	4/20/2015 13:48
GROSS BETA	2.9 (+/- 1.1)	LT	1.6	pCi/l	NA	4/20/2015 13:48
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **4/28/2015**	PrepBy: **TDE**
Tracer: U-232	*79.5*		*30-110*	*%REC*	DL = NA	5/4/2015 07:54
U-234	**2.41 (+/- 0.51)**		**0.03**	**pCi/l**	NA	5/4/2015 07:54
U-235	0.099 (+/- 0.072)	LT	0.034	pCi/l	NA	5/4/2015 07:54
U-238	**1.34 (+/- 0.33)**		**0.03**	**pCi/l**	NA	5/4/2015 07:54
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **4/17/2015**	PrepBy: **PJW**
Ra-226	0.4 (+/- 0.2)	LT	0.05	pCi/l	NA	4/24/2015 14:02
Carr: BARIUM	*63.2*		*40-110*	*%REC*	DL = NA	4/24/2015 14:02
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/10/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.36)	U	0.82	pCi/l	NA	4/27/2015 08:07
Carr: BARIUM	*65.9*		*40-110*	*%REC*	DL = NA	4/27/2015 08:07

Client:	SVL Analytical	**Date:**	*06-May-15*
Project:	5D0067	**Work Order:**	1504187
Sample ID:	NSH-022-040215	**Lab ID:**	1504187-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/2/2015 14:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504187
Project: 5D0067

Date: *5/6/2015 5:02:2*

QC BATCH REPORT

Batch ID: **RE150417-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150417-1** Units: **pCi/l** Analysis Date: **4/24/2015 14:02**
Client ID: Run ID: **RE150417-1A** Prep Date: **4/17/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	25.4 (+/- 6.5)	0.2	30.71		82.8	67-120					P
Carr: BARIUM	31600		33150		95.3	40-110					

LCSD Sample ID: **RE150417-1** Units: **pCi/l** Analysis Date: **4/24/2015 14:34**
Client ID: Run ID: **RE150417-1A** Prep Date: **4/17/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	24.3 (+/- 6.2)	0.3	30.71		79.1	67-120		25.4	0.1	2.1	P
Carr: BARIUM	31560		33150		95.2	40-110		31600			

MB Sample ID: **RE150417-1** Units: **pCi/l** Analysis Date: **4/24/2015 14:02**
Client ID: Run ID: **RE150417-1A** Prep Date: **4/17/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.151									U
Carr: BARIUM	31900		33150		96.2	40-110					

The following samples were analyzed in this batch: 1504187-1

Client: SVL Analytical
Work Order: 1504187
Project: 5D0067

QC BATCH REPORT

Batch ID: **AS150423-1-5** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 07:53**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.58 (+/- 0.81)	0.04	4.416		104	82-122					P
U-238	5.19 (+/- 0.91)	0.03	4.585		113	78-126					P
Tracer: U-232	3.48	0.05	4.168		83.5	30-110					

LCSD Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 07:53**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.5 (+/- 0.78)	0.04	4.416		102	82-122		4.58	0.07	2.1	P
U-238	4.74 (+/- 0.82)	0.04	4.585		103	78-126		5.19	0.4	2.1	P
Tracer: U-232	4.02	0.05	4.168		96.5	30-110		3.48			

MB Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 15:01**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.015									U
U-235	0.013 (+/- 0.01)	0.005									B3
U-238	0.019 (+/- 0.013)	0.015									B3
Tracer: U-232	3.91	0.02	4.168		93.8	30-110					

The following samples were analyzed in this batch: 1504187-1

Client: SVL Analytical
Work Order: 1504187
Project: 5D0067

QC BATCH REPORT

Batch ID: **AB150415-2-5** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150415-2** Units: **pCi/l** Analysis Date: **4/21/2015 09:35**

Client ID: Run ID: **AB150415-2A** Prep Date: **4/15/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	229 (+/- 39)	4	224.3		102	70-130					P,M3
GROSS BETA	203 (+/- 34)	8	204.1		99.4	70-130					P,M3

MB Sample ID: **AB150415-2** Units: **pCi/l** Analysis Date: **4/20/2015 13:48**

Client ID: Run ID: **AB150415-2A** Prep Date: **4/15/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.6									U
GROSS BETA	ND	1.07									U

The following samples were analyzed in this batch: 1504187-1

Client: SVL Analytical
Work Order: 1504187
Project: 5D0067

QC BATCH REPORT

Batch ID: **RA150410-1-1** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150410-1** Units: **pCi/l** Analysis Date: **4/27/2015 08:07**
Client ID: Run ID: **RA150410-1A** Prep Date: **4/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7.6 (+/- 1.8)	0.5	7.836		97.6	70-130					P
Carr: BARIUM	27010		29740		90.8	40-110					

LCSD Sample ID: **RA150410-1** Units: **pCi/l** Analysis Date: **4/27/2015 08:07**
Client ID: Run ID: **RA150410-1A** Prep Date: **4/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8 (+/- 1.9)	0.5	7.836		102	70-130		7.6	0.1	2.1	P
Carr: BARIUM	27100		29740		91.1	40-110		27010			

MB Sample ID: **RA150410-1** Units: **pCi/l** Analysis Date: **4/27/2015 08:07**
Client ID: Run ID: **RA150410-1A** Prep Date: **4/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.54									U
Carr: BARIUM	27240		29740		91.6	40-110					

The following samples were analyzed in this batch: 1504187-1

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-001	**Sampling Date**	4/2/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	NSH-022-040215	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0067-01			

Comments: Large analyte concentration required dilution such that reporting to the MDL is not possible

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1,1-Trichloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1,2,2-Tetrachloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1,2-Trichloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1-Dichloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1-Dichloroethene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,1-dichloropropene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2,3-Trichlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2,3-Trichloropropane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2,4-Trichlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2,4-Trimethylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2-Dibromoethane (EDB)	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2-Dichlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2-Dichloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,2-Dichloropropane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,3,5-Trimethylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,3-Dichlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,3-Dichloropropane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
1,4-Dichlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
2,2-Dichloropropane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
2-Butanone	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
2-Chlorotoluene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
4-Chlorotoluene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Acetone	187	ug/L	50	4/9/2015	SAT	EPA 524.3	D2
Acrylonitrile	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Benzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Bromobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-001	**Sampling Date**	4/2/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	NSH-022-040215	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0067-01			

Comments Large analyte concentration required dilution such that reporting to the MDL is not possible

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Bromodichloromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Bromoform	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Bromomethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Carbon disulfide	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Carbon Tetrachloride	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Chlorobenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Chloroethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Chloroform	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Chloromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
cis-1,2-dichloroethene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
cis-1,3-Dichloropropene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Dibromochloromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Dibromomethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Dichlorodifluoromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Diethyl ether	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Ethylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Hexachlorobutadiene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Iodomethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Isopropylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
m+p-Xylene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Methylene chloride	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
methyl-t-butyl ether (MTBE)	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Naphthalene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
n-Butylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
n-Propylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
o-Xylene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
p-isopropyltoluene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
sec-Butylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-001	**Sampling Date**	4/2/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	NSH-022-040215	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0067-01			

Comments Large analyte concentration required dilution such that reporting to the MDL is not possible

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
tert-Butylbenzene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Tetrachloroethene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Toluene	1940	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Total Xylene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
trans-1,2-Dichloroethene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
trans-1,3-Dichloropropene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
trans-1-4-Dichloro-2-butene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Trichloroethene	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Trichlorofluoromethane	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2
Vinyl Chloride	ND	ug/L	10	4/9/2015	SAT	EPA 524.3	D2

Surrogate Data

Sample Number 150407045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	94.0	70-130
Bromofluorobenzene	EPA 524.3	106.8	70-130
Toluene-d8	EPA 524.3	101.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-002	**Sampling Date**	4/3/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0067-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	2.5	4/9/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-002	**Sampling Date**	4/3/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0067-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-002	**Sampling Date**	4/3/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0067-02			
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.5	4/9/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150407045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	94.6	70-130
Bromofluorobenzene	EPA 524.3	95.4	70-130
Toluene-d8	EPA 524.3	93.8	70-130

Authorized Signature

John Coddington, Lab Manager

D2	Sample required dilution due to high concentration of target analyte
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.89	ug/L	10	98.9	70-130	4/9/2015	4/9/2015
Toluene	10.1	ug/L	10	101.0	70-130	4/9/2015	4/9/2015
Tetrachloroethene	9.89	ug/L	10	98.9	70-130	4/9/2015	4/9/2015
Ethylbenzene	10.2	ug/L	10	102.0	70-130	4/9/2015	4/9/2015
Chlorobenzene	10.2	ug/L	10	102.0	70-130	4/9/2015	4/9/2015
Benzene	10.0	ug/L	10	100.0	70-130	4/9/2015	4/9/2015
1,1-Dichloroethene	9.61	ug/L	10	96.1	70-130	4/9/2015	4/9/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150403004-001	Trichloroethene	ND	9.78	ug/L	10	97.8	70-130	4/9/2015	4/9/2015
150403004-001	Toluene	ND	10.8	ug/L	10	108.0	70-130	4/9/2015	4/9/2015
150403004-001	Tetrachloroethene	ND	8.67	ug/L	10	86.7	70-130	4/9/2015	4/9/2015
150403004-001	Ethylbenzene	ND	10.6	ug/L	10	106.0	70-130	4/9/2015	4/9/2015
150403004-001	Chlorobenzene	ND	10.4	ug/L	10	104.0	70-130	4/9/2015	4/9/2015
150403004-001	Benzene	ND	11.0	ug/L	10	110.0	70-130	4/9/2015	4/9/2015
150403004-001	1,1-Dichloroethene	ND	10.4	ug/L	10	104.0	70-130	4/9/2015	4/9/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.31	ug/L	10	93.1	4.9	0-30	4/9/2015	4/9/2015
Toluene	10.5	ug/L	10	105.0	2.8	0-30	4/9/2015	4/9/2015
Tetrachloroethene	8.67	ug/L	10	86.7	0.0	0-30	4/9/2015	4/9/2015
Ethylbenzene	10.3	ug/L	10	103.0	2.9	0-30	4/9/2015	4/9/2015
Chlorobenzene	10.4	ug/L	10	104.0	0.0	0-30	4/9/2015	4/9/2015
Benzene	10.1	ug/L	10	101.0	8.5	0-30	4/9/2015	4/9/2015
1,1-Dichloroethene	9.92	ug/L	10	99.2	4.7	0-30	4/9/2015	4/9/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,1-dichloropropene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/9/2015	4/9/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/9/2015	4/9/2015
2-Chlorotoluene	ND	ug/L	0.5	4/9/2015	4/9/2015
4-Chlorotoluene	ND	ug/L	0.5	4/9/2015	4/9/2015
Benzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Bromobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Bromochloromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Bromodichloromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Bromoform	ND	ug/L	0.5	4/9/2015	4/9/2015
Bromomethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/9/2015	4/9/2015
Chlorobenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Chloroethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Chloroform	ND	ug/L	0.5	4/9/2015	4/9/2015
Chloromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/9/2015	4/9/2015
Dibromochloromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Dibromomethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Ethylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/9/2015	4/9/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Methylene chloride	ND	ug/L	0.5	4/9/2015	4/9/2015
Naphthalene	ND	ug/L	0.5	4/9/2015	4/9/2015
n-Butylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
n-Propylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
p-isopropyltoluene	ND	ug/L	0.5	4/9/2015	4/9/2015
sec-Butylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Styrene	ND	ug/L	0.5	4/9/2015	4/9/2015
tert-Butylbenzene	ND	ug/L	0.5	4/9/2015	4/9/2015
Tetrachloroethene	ND	ug/L	0.5	4/9/2015	4/9/2015
Toluene	ND	ug/L	0.5	4/9/2015	4/9/2015
Total Xylene	ND	ug/L	0.5	4/9/2015	4/9/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/9/2015	4/9/2015
Trichloroethene	ND	ug/L	0.5	4/9/2015	4/9/2015
Trichlorofluoromethane	ND	ug/L	0.5	4/9/2015	4/9/2015
Vinyl Chloride	ND	ug/L	0.5	4/9/2015	4/9/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number 150407045-001
Client Sample ID NSH-022-040215
Matrix Water
Comments: RERUN via 8260B at client request

Sampling Date 4/2/2015
Sampling Time 2:00 PM
Sample Location W5D0067-01

Date/Time Received 4/7/2015 10:45 AM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1,1-Trichloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1,2,2-Tetrachloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1,2-Trichloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1-Dichloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1-Dichloroethene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,1-dichloropropene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2,3-Trichlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2,3-Trichloropropane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2,4-Trichlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2,4-Trimethylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2-Dibromoethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2-Dichlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2-Dichloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,2-Dichloropropane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,3,5-Trimethylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,3-Dichlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,3-Dichloropropane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
1,4-Dichlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
2,2-Dichloropropane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
2-Chlorotoluene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
2-hexanone	ND	ug/L	125	4/21/2015	SAT	EPA 8260B	D2, H3
4-Chlorotoluene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Acetone	ND	ug/L	125	4/21/2015	SAT	EPA 8260B	D2, H3
Acrylonitrile	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Benzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Bromobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number 150407045-001
Client Sample ID NSH-022-040215
Matrix Water
Comments **RERUN via 8260B at client request**

Sampling Date 4/2/2015
Sampling Time 2:00 PM
Sample Location W5D0067-01

Date/Time Received 4/7/2015 10:45 AM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Bromodichloromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Bromoform	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Bromomethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Carbon disulfide	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Carbon Tetrachloride	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Chlorobenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Chloroethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Chloroform	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Chloromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
cis-1,2-dichloroethene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
cis-1,3-Dichloropropene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Dibromochloromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Dibromomethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Dichlorodifluoromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Ethylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Hexachlorobutadiene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Isopropylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
m+p-Xylene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Methyl ethyl ketone (MEK)	ND	ug/L	125	4/21/2015	SAT	EPA 8260B	D2, H3
Methyl isobutyl ketone (MIBK)	ND	ug/L	125	4/21/2015	SAT	EPA 8260B	D2, H3
Methylene chloride	ND	ug/L	125	4/21/2015	SAT	EPA 8260B	D2, H3
methyl-t-butyl ether (MTBE)	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Naphthalene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
n-Butylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
n-Propylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
o-Xylene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
p-isopropyltoluene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
sec-Butylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number 150407045-001
Client Sample ID NSH-022-040215
Matrix Water
Comments **RERUN via 8260B at client request**

Sampling Date 4/2/2015
Sampling Time 2:00 PM
Sample Location W5D0067-01

Date/Time Received 4/7/2015 10:45 AM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
tert-Butylbenzene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Tetrachloroethene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Toluene	2080	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
trans-1,2-Dichloroethene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
trans-1,3-Dichloropropene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Trichloroethene	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Trichloroflouromethane	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3
Vinyl Chloride	ND	ug/L	25	4/21/2015	SAT	EPA 8260B	D2, H3

Surrogate Data

Sample Number 150407045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260B	104.4	70-130
4-Bromofluorobenzene	EPA 8260B	101.2	70-130
Toluene-d8	EPA 8260B	102.0	70-130

Authorized Signature

John Coddington, Lab Manager

D2	Sample required dilution due to high concentration of target analyte
H3	Sample was received and/or analysis requested past holding time.
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.80	ug/L	10	98.0	72-125	4/21/2015	4/22/2015
Toluene	9.58	ug/L	10	95.8	76-123	4/21/2015	4/22/2015
Tetrachloroethene	9.19	ug/L	10	91.9	78-119	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	83-117	4/21/2015	4/22/2015
Ethylbenzene	9.95	ug/L	10	99.5	84-115	4/21/2015	4/22/2015
Chlorobenzene	10.0	ug/L	10	100.0	85-115	4/21/2015	4/22/2015
Benzene	9.71	ug/L	10	97.1	75-125	4/21/2015	4/22/2015
1,1-Dichloroethene	9.40	ug/L	10	94.0	68-127	4/21/2015	4/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.99	ug/L	10	99.9	1.9	0-20	4/21/2015	4/22/2015
Toluene	9.82	ug/L	10	98.2	2.5	0-20	4/21/2015	4/22/2015
Tetrachloroethene	9.78	ug/L	10	97.8	6.2	0-20	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	0.0	0-20	4/21/2015	4/22/2015
Ethylbenzene	10.0	ug/L	10	100.0	0.5	0-20	4/21/2015	4/22/2015
Chlorobenzene	9.86	ug/L	10	98.6	1.4	0-20	4/21/2015	4/22/2015
Benzene	9.93	ug/L	10	99.3	2.2	0-20	4/21/2015	4/22/2015
1,1-Dichloroethene	9.96	ug/L	10	99.6	5.8	0-20	4/21/2015	4/22/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150421045-001	Trichloroethene	ND	9.62	ug/L	10	96.2	56-143	4/21/2015	4/22/2015
150421045-001	Toluene	0.51	9.48	ug/L	10	89.7	66-136	4/21/2015	4/22/2015
150421045-001	Tetrachloroethene	ND	9.54	ug/L	10	95.4	53-149	4/21/2015	4/22/2015
150421045-001	o-Xylene	ND	9.45	ug/L	10	94.5	68-134	4/21/2015	4/22/2015
150421045-001	Ethylbenzene	ND	9.25	ug/L	10	92.5	70-137	4/21/2015	4/22/2015
150421045-001	Chlorobenzene	ND	9.22	ug/L	10	92.2	68-136	4/21/2015	4/22/2015
150421045-001	Benzene	ND	9.27	ug/L	10	92.7	63-139	4/21/2015	4/22/2015
150421045-001	1,1-Dichloroethene	ND	9.49	ug/L	10	94.9	59-144	4/21/2015	4/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromoethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
2-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
2-hexanone	ND	ug/L	2.5	4/21/2015	4/22/2015
4-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
Acetone	ND	ug/L	2.5	4/21/2015	4/22/2015
Acrylonitrile	ND	ug/L	0.5	4/21/2015	4/22/2015
Benzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromodichloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromoform	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon disulfide	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/21/2015	4/22/2015
Chlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroform	ND	ug/L	0.5	4/21/2015	4/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Chloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Ethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/21/2015	4/22/2015
Isopropylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
m+p-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methylene chloride	ND	ug/L	2.5	4/21/2015	4/22/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/21/2015	4/22/2015
Naphthalene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Propylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
o-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
p-isopropyltoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
sec-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Styrene	ND	ug/L	0.5	4/21/2015	4/22/2015
tert-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Tetrachloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Toluene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroflouromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Vinyl Chloride	ND	ug/L	0.5	4/21/2015	4/22/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-001	**Sampling Date**	4/2/2015	**Date/Time Received**	4/7/2015 10:45 AM
Client Sample ID	NSH-022-040215	**Sampling Time**	2:00 PM	**Extraction Date**	4/09/15
Matrix	Water	**Sample Location**	W5D0067-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	0.00776	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	J
Acenaphthene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	0.00614	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	J
Benzo[a]anthracene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Fluorene	0.00781	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	J

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Sample Number	150407045-001	**Sampling Date**	4/2/2015	**Date/Time Received**	4/7/2015	10:45 AM
Client Sample ID	NSH-022-040215	**Sampling Time**	2:00 PM	**Extraction Date**	4/09/15	
Matrix	Water	**Sample Location**	W5D0067-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	
Phenanthrene	0.00662	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	J
Pyrene	ND	ug/L	0.005	0.01	4/15/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150407045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	84.8	10-125

Authorized Signature

John Coddington, Lab Manager

J	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.56	ug/L	5	71.2	62-139	4/9/2015	4/15/2015
Acenaphthene	3.56	ug/L	5	71.2	70-135	4/9/2015	4/15/2015
Acenaphthylene	3.41	ug/L	5	68.2	67-121	4/9/2015	4/15/2015
Anthracene	3.51	ug/L	5	70.2	63-113	4/9/2015	4/15/2015
Benzo(ghi)perylene	4.14	ug/L	5	82.8	71-141	4/9/2015	4/15/2015
Benzo[a]anthracene	4.19	ug/L	5	83.8	71-142	4/9/2015	4/15/2015
Benzo[a]pyrene	4.01	ug/L	5	80.2	71-143	4/9/2015	4/15/2015
2-Methylnaphthalene	3.96	ug/L	5	79.2	56-128	4/9/2015	4/15/2015
Benzo[k]fluoranthene	3.63	ug/L	5	72.6	69-149	4/9/2015	4/15/2015
Pyrene	3.58	ug/L	5	71.6	69-119	4/9/2015	4/15/2015
Dibenz[a,h]anthracene	4.25	ug/L	5	85.0	68-138	4/9/2015	4/15/2015
Fluoranthene	3.63	ug/L	5	72.6	67-120	4/9/2015	4/15/2015
Fluorene	3.67	ug/L	5	73.4	60-116	4/9/2015	4/15/2015
Indeno[1,2,3-cd]pyrene	4.26	ug/L	5	85.2	68-140	4/9/2015	4/15/2015
Naphthalene	3.67	ug/L	5	73.4	51-122	4/9/2015	4/15/2015
Phenanthrene	3.69	ug/L	5	73.8	71-126	4/9/2015	4/15/2015
Benzo[b]fluoranthene	4.22	ug/L	5	84.4	68-148	4/9/2015	4/15/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.65	ug/L	5	73.0	2.5	0-50	4/9/2015	4/15/2015
Acenaphthene	3.69	ug/L	5	73.8	3.6	0-50	4/9/2015	4/15/2015
Acenaphthylene	3.48	ug/L	5	69.6	2.0	0-50	4/9/2015	4/15/2015
Anthracene	3.52	ug/L	5	70.4	0.3	0-50	4/9/2015	4/15/2015
Benzo(ghi)perylene	4.15	ug/L	5	83.0	0.2	0-50	4/9/2015	4/15/2015
Benzo[a]anthracene	4.26	ug/L	5	85.2	1.7	0-50	4/9/2015	4/15/2015
Benzo[a]pyrene	4.13	ug/L	5	82.6	2.9	0-50	4/9/2015	4/15/2015
2-Methylnaphthalene	4.02	ug/L	5	80.4	1.5	0-50	4/9/2015	4/15/2015
Benzo[k]fluoranthene	3.78	ug/L	5	75.6	4.0	0-50	4/9/2015	4/15/2015
Pyrene	3.64	ug/L	5	72.8	1.7	0-50	4/9/2015	4/15/2015
Dibenz[a,h]anthracene	4.19	ug/L	5	83.8	1.4	0-50	4/9/2015	4/15/2015
Fluoranthene	3.71	ug/L	5	74.2	2.2	0-50	4/9/2015	4/15/2015
Fluorene	3.83	ug/L	5	76.6	4.3	0-50	4/9/2015	4/15/2015
Indeno[1,2,3-cd]pyrene	4.28	ug/L	5	85.6	0.5	0-50	4/9/2015	4/15/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150407045
Project Name: SVL #W5D0067

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.71	ug/L	5	74.2	1.1	0-50	4/9/2015	4/15/2015
Phenanthrene	3.74	ug/L	5	74.8	1.3	0-50	4/9/2015	4/15/2015
Benzo[b]fluoranthene	4.40	ug/L	5	88.0	4.2	0-50	4/9/2015	4/15/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/9/2015	4/15/2015
Acenaphthene	ND	ug/L	0.01	4/9/2015	4/15/2015
Acenaphthylene	ND	ug/L	0.01	4/9/2015	4/15/2015
Anthracene	ND	ug/L	0.01	4/9/2015	4/15/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/9/2015	4/15/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/9/2015	4/15/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/9/2015	4/15/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/9/2015	4/15/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/9/2015	4/15/2015
Chrysene	ND	ug/L	0.01	4/9/2015	4/15/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/9/2015	4/15/2015
Fluoranthene	ND	ug/L	0.01	4/9/2015	4/15/2015
Fluorene	ND	ug/L	0.01	4/9/2015	4/15/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/9/2015	4/15/2015
Naphthalene	ND	ug/L	0.01	4/9/2015	4/15/2015
Phenanthrene	ND	ug/L	0.01	4/9/2015	4/15/2015
Pyrene	ND	ug/L	0.01	4/9/2015	4/15/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150407045
Order Date: 4/7/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0067
Comment:

Sample #: 150407045-001 **Customer Sample #:** NSH-022-040215

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/2/2015
Quantity: 4 **Date Received:** 4/7/2015 10:45:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	4/17/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	4/17/2015	***Normal (~10 Days)***
VOLATILES 8260 SVL LIST	M	EPA 8260B	4/22/2015	***Normal (~10 Days)***

Sample #: 150407045-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/3/2015
Quantity: 1 **Date Received:** 4/7/2015 10:45:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	4/17/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	2.1
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0067

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.4°C

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY AND ALDRICH
Contact: LAUREN CANDRENA
Address: 400 E VAN BUREN ST SUITE 545, PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandrena@haleyaldrich.com

Invoice Sent To: GUNNISON CAPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N. 44TH ST SUITE 300, PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: N.C.

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection: Date	Collection: Time	Collected by: (Init.)	Misc.: Matrix Type (From Table 1)	Misc.: No. of Containers	Preservative(s): Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZN AC	Analyses Required: METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAHs	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	N6H-022-040215	4/2/15	1400	CG	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		METALS AND SILICA SAMPLES WAS FIELD FILTERED WITH A 0.45um DISPOSABLE GROUNDWATER FILTER CAPSULE THEN PRESERVED WITH HNO_3.
2																									
3	TRIP BLANK					1																X			
4																									
5																									
6																									
7																									SHIPPED UPS TRACKING: 1Z 9X8 989 23 1001 2560
8																									
9																									
10																									

Relinquished by: N.C.	Date: 4/2/15	Time: 1530	Received by: C. Flores	Date: 4/3/15	Time: 9:45
Relinquished by: J. Jacobson	Date: 4-6-15	Time: 1055	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-022-040215	W5D0067-01	Ground Water	02-Apr-15 14:00	CG	03-Apr-2015	
TRIP BLANK	W5D0067-02	Water	—		03-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Client Sample ID: **NSH-022-040215**
SVL Sample ID: **W5D0067-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 02-Apr-15 14:00
Received: 03-Apr-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W515002	AS	04/16/15 11:22	U
EPA 200.7	**Calcium**	9.53	mg/L	0.040	0.029		W515002	AS	04/16/15 11:22	
EPA 200.7	**Iron**	0.034	mg/L	0.060	0.026		W515002	AS	04/16/15 11:22	J
EPA 200.7	**Magnesium**	3.80	mg/L	0.20	0.11		W515002	AS	04/16/15 11:22	
EPA 200.7	**Potassium**	2.91	mg/L	0.50	0.17		W515002	AS	04/16/15 11:22	
EPA 200.7	**Silica (SiO2)**	0.50	mg/L	0.17	0.12		W515002	AS	04/16/15 11:22	
EPA 200.7	**Sodium**	66.2	mg/L	0.50	0.05		W515002	AS	04/16/15 11:22	
EPA 200.8	**Antimony**	0.00131	mg/L	0.00300	0.00019		W515035	DT	04/14/15 14:50	J
EPA 200.8	Arsenic	< 0.00027	mg/L	0.00300	0.00027		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Barium**	0.0614	mg/L	0.00100	0.000099		W515035	DT	04/14/15 14:50	
EPA 200.8	Beryllium	< 0.000048	mg/L	0.00020	0.000048		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Boron**	0.155	mg/L	0.0050	0.0012		W515035	DT	04/14/15 14:50	M3
EPA 200.8	**Cadmium**	0.00062	mg/L	0.00020	0.000072		W515035	DT	04/14/15 14:50	
EPA 200.8	Chromium	< 0.0004	mg/L	0.0015	0.0004		W515035	DT	04/14/15 14:50	U
EPA 200.8	Cobalt	< 0.000054	mg/L	0.00100	0.000054		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Copper**	0.00048	mg/L	0.00100	0.00015		W515035	DT	04/14/15 14:50	J
EPA 200.8	Lead	< 0.000031	mg/L	0.00300	0.000031		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Manganese**	0.0136	mg/L	0.00100	0.000025		W515035	DT	04/14/15 14:50	
EPA 200.8	**Molybdenum**	0.654	mg/L	0.00100	0.00009		W515035	DT	04/14/15 14:50	M3
EPA 200.8	Nickel	< 0.0004	mg/L	0.0010	0.0004		W515035	DT	04/14/15 14:50	U
EPA 200.8	Selenium	< 0.0006	mg/L	0.0030	0.0006		W515035	DT	04/14/15 14:50	U
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W515035	DT	04/14/15 14:50	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Uranium**	0.00113	mg/L	0.00100	0.000014		W515035	DT	04/14/15 14:50	
EPA 200.8	Vanadium	< 0.0009	mg/L	0.0030	0.0009		W515035	DT	04/14/15 14:50	U
EPA 200.8	**Zinc**	0.0661	mg/L	0.0050	0.0010		W515035	DT	04/14/15 14:50	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W515023	STA	04/08/15 13:46	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	108	mg/L as CaCO3	1.0			W514258	DKS	04/07/15 08:01	
SM 2320B	**Bicarbonate**	80.6	mg/L as CaCO3	1.0			W514258	DKS	04/07/15 08:01	
SM 2320B	**Carbonate**	27.4	mg/L as CaCO3	1.0			W514258	DKS	04/07/15 08:01	
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W514258	DKS	04/07/15 08:01	U
SM 2510 B	**Specific conductance**	354	µmhos/cm	5.00			W515008	RS	04/06/15 07:15	
SM 2540 C	**Total Diss. Solids**	210	mg/L	10			W515011	RS	04/06/15 10:50	
SM 4500 H B	**pH @23.0°C**	9.47	pH Units				W514258	DKS	04/07/15 08:01	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W515062	VRH	04/07/15 14:35	U
SM 4500-P-E	**Orthophosphate as P**	0.008	mg/L	0.010	0.006		W514251	SM	04/03/15 12:37	J
SM 4500-S-F	Sulfide	< 0.27	mg/L	1.00	0.27		W515154	SM	04/09/15 13:29	U
SM 5310B	**Total Organic Carbon**	3.61	mg/L	1.00	0.24		W516096	MCB	04/14/15 18:30	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Client Sample ID: **NSH-022-040215**
SVL Sample ID: **W5D0067-01 (Ground Water)**

Sampled: 02-Apr-15 14:00
Received: 03-Apr-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	29.0	mg/L	2.00	0.56	10	W514256	JMW	04/03/15 12:48	D2,M3
EPA 300.0	**Fluoride**	4.26	mg/L	0.100	0.022		W514256	JMW	04/03/15 12:37	
EPA 300.0	Nitrate as N	< 0.008	mg/L	0.050	0.008		W514256	JMW	04/03/15 12:37	U
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W514256	JMW	04/03/15 12:37	U
EPA 300.0	**Sulfate as SO4**	40.5	mg/L	3.00	0.50	10	W514256	JMW	04/03/15 12:48	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.75 meq/L Anion Sum: 4.05 meq/L C/A Balance: -3.82 % Calculated TDS: 222 TDS/cTDS: 0.95 TDS/eC: 0.59

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W515002	16-Apr-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W515002	16-Apr-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W515002	16-Apr-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W515002	16-Apr-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W515002	16-Apr-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W515002	16-Apr-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W515002	16-Apr-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W515035	14-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W515035	14-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W515035	14-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W515035	14-Apr-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W515035	14-Apr-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W515035	14-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W515035	14-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W515035	14-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W515035	14-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W515035	14-Apr-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W515035	14-Apr-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W515035	14-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W515035	14-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W515035	14-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W515035	14-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W515035	14-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W515035	14-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W515035	14-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W515035	14-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W515023	08-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.62		1.0	W514258	07-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.62		1.0	W514258	07-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W514258	07-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W514258	07-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W515011	06-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W515062	07-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W514251	03-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W515154	09-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W516096	14-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W516096	15-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W514256	03-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W514256	03-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W514256	03-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W514256	03-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W514256	03-Apr-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.04	1.00	104	85 - 115	W515002	16-Apr-15	
EPA 200.7	Calcium	mg/L	19.8	20.0	99.0	85 - 115	W515002	16-Apr-15	
EPA 200.7	Iron	mg/L	9.76	10.0	97.6	85 - 115	W515002	16-Apr-15	
EPA 200.7	Magnesium	mg/L	18.7	20.0	93.5	85 - 115	W515002	16-Apr-15	
EPA 200.7	Potassium	mg/L	20.9	20.0	104	85 - 115	W515002	16-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	98.6	85 - 115	W515002	16-Apr-15	
EPA 200.7	Sodium	mg/L	18.4	19.0	97.0	85 - 115	W515002	16-Apr-15	
EPA 200.8	Antimony	mg/L	0.0247	0.0250	98.7	85 - 115	W515035	14-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0243	0.0250	97.0	85 - 115	W515035	14-Apr-15	
EPA 200.8	Barium	mg/L	0.0253	0.0250	101	85 - 115	W515035	14-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0226	0.0250	90.2	85 - 115	W515035	14-Apr-15	
EPA 200.8	Boron	mg/L	0.0234	0.0250	93.6	85 - 115	W515035	14-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0248	0.0250	99.3	85 - 115	W515035	14-Apr-15	
EPA 200.8	Chromium	mg/L	0.0236	0.0250	94.2	85 - 115	W515035	14-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0238	0.0250	95.1	85 - 115	W515035	14-Apr-15	
EPA 200.8	Copper	mg/L	0.0242	0.0250	96.7	85 - 115	W515035	14-Apr-15	
EPA 200.8	Lead	mg/L	0.0256	0.0250	102	85 - 115	W515035	14-Apr-15	
EPA 200.8	Manganese	mg/L	0.0236	0.0250	94.4	85 - 115	W515035	14-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0243	0.0250	97.3	85 - 115	W515035	14-Apr-15	
EPA 200.8	Nickel	mg/L	0.0244	0.0250	97.5	85 - 115	W515035	14-Apr-15	
EPA 200.8	Selenium	mg/L	0.0242	0.0250	96.7	85 - 115	W515035	14-Apr-15	
EPA 200.8	Silver	mg/L	0.0259	0.0250	104	85 - 115	W515035	14-Apr-15	
EPA 200.8	Thallium	mg/L	0.0255	0.0250	102	85 - 115	W515035	14-Apr-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W515035	14-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0237	0.0250	94.8	85 - 115	W515035	14-Apr-15	
EPA 200.8	Zinc	mg/L	0.0252	0.0250	101	85 - 115	W515035	14-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00521	0.00500	104	85 - 115	W515023	08-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	96.9	99.3	97.6	85 - 115	W514258	07-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	96.9	99.3	97.6	85 - 115	W514258	07-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	300	306	97.9	90 - 110	W515008	06-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W515062	07-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.841	0.786	107	90 - 110	W514251	03-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.49	2.50	99.8	80 - 120	W515154	09-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	31.0	34.3	90.3	90 - 110	W516096	14-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	31.2	34.3	90.9	90 - 110	W516096	14-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.88	3.00	96.0	90 - 110	W514256	03-Apr-15	
EPA 300.0	Fluoride	mg/L	1.95	2.00	97.5	90 - 110	W514256	03-Apr-15	
EPA 300.0	Nitrate as N	mg/L	1.99	2.01	99.0	90 - 110	W514256	03-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.60	2.51	104	90 - 110	W514256	03-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.88	10.0	98.8	90 - 110	W514256	03-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	109	108	1.2	20	W514258	07-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	80.8	80.6	0.3	20	W514258	07-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	28.5	27.4	3.8	20	W514258	07-Apr-15	
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W514258	07-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	356	354	0.5	20	W515008	06-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	848	846	0.2	10	W515011	06-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	906	886	2.2	10	W515011	06-Apr-15	
SM 4500 H B	pH	pH Units	9.46	9.47	0.1	20	W514258	07-Apr-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.11	<0.036	1.00	111	70 - 130	W515002	16-Apr-15	
EPA 200.7	Calcium	mg/L	30.4	9.53	20.0	104	70 - 130	W515002	16-Apr-15	
EPA 200.7	Iron	mg/L	10.3	0.034	10.0	103	70 - 130	W515002	16-Apr-15	
EPA 200.7	Magnesium	mg/L	23.8	3.80	20.0	99.9	70 - 130	W515002	16-Apr-15	
EPA 200.7	Potassium	mg/L	25.3	2.91	20.0	112	70 - 130	W515002	16-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	11.6	0.50	10.7	104	70 - 130	W515002	16-Apr-15	
EPA 200.7	Sodium	mg/L	85.6	66.2	19.0	102	70 - 130	W515002	16-Apr-15	
EPA 200.8	Antimony	mg/L	0.0262	0.00131	0.0250	99.4	70 - 130	W515035	14-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0237	<0.00027	0.0250	94.8	70 - 130	W515035	14-Apr-15	
EPA 200.8	Barium	mg/L	0.0851	0.0614	0.0250	95.0	70 - 130	W515035	14-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0226	<0.000048	0.0250	90.2	70 - 130	W515035	14-Apr-15	
EPA 200.8	Boron	mg/L	0.177	0.155	0.0250	90.7	70 - 130	W515035	14-Apr-15	M3
EPA 200.8	Cadmium	mg/L	0.0238	0.00062	0.0250	92.9	70 - 130	W515035	14-Apr-15	
EPA 200.8	Chromium	mg/L	0.0235	<0.0004	0.0250	94.2	70 - 130	W515035	14-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0232	<0.000054	0.0250	92.8	70 - 130	W515035	14-Apr-15	
EPA 200.8	Copper	mg/L	0.0236	0.00048	0.0250	92.4	70 - 130	W515035	14-Apr-15	
EPA 200.8	Lead	mg/L	0.0238	<0.000031	0.0250	95.1	70 - 130	W515035	14-Apr-15	
EPA 200.8	Manganese	mg/L	0.0376	0.0136	0.0250	96.0	70 - 130	W515035	14-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.673	0.654	0.0250	77.3	70 - 130	W515035	14-Apr-15	M3
EPA 200.8	Nickel	mg/L	0.0234	<0.00039	0.0250	93.7	70 - 130	W515035	14-Apr-15	
EPA 200.8	Selenium	mg/L	0.0232	<0.00062	0.0250	92.7	70 - 130	W515035	14-Apr-15	
EPA 200.8	Silver	mg/L	0.0244	<0.000021	0.0250	97.8	70 - 130	W515035	14-Apr-15	
EPA 200.8	Thallium	mg/L	0.0239	<0.000026	0.0250	95.6	70 - 130	W515035	14-Apr-15	
EPA 200.8	Uranium	mg/L	0.0267	0.00113	0.0250	102	70 - 130	W515035	14-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0244	<0.00087	0.0250	97.6	70 - 130	W515035	14-Apr-15	
EPA 200.8	Zinc	mg/L	0.0907	0.0661	0.0250	98.4	70 - 130	W515035	14-Apr-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00098	<0.00004	0.00100	98.0	70 - 130	W515023	08-Apr-15	
EPA 245.1	Mercury	mg/L	0.00101	<0.00004	0.00100	101	70 - 130	W515023	08-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	<0.0025	0.100	102	75 - 125	W515062	07-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.599	0.082	0.500	103	75 - 125	W514251	03-Apr-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.78	<0.27	2.50	111	80 - 120	W515154	09-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.3	0.40	50.0	97.8	80 - 120	W516096	14-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	32.9	29.0	3.00	R > 4S	90 - 110	W514256	03-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	6.09	4.26	2.00	91.2	90 - 110	W514256	03-Apr-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Nitrate as N	mg/L	2.06	<0.008	2.00	103	90 - 110	W514256	03-Apr-15	
EPA 300.0	Nitrite as N	mg/L	1.88	<0.014	2.00	94.0	90 - 110	W514256	03-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	50.7	40.5	10.0	102	90 - 110	W514256	03-Apr-15	D2

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.09	1.11	1.00	109	1.4	20	W515002	16-Apr-15	
EPA 200.7	Calcium	mg/L	30.5	30.4	20.0	105	0.3	20	W515002	16-Apr-15	
EPA 200.7	Iron	mg/L	10.4	10.3	10.0	103	0.6	20	W515002	16-Apr-15	
EPA 200.7	Magnesium	mg/L	24.1	23.8	20.0	101	1.2	20	W515002	16-Apr-15	
EPA 200.7	Potassium	mg/L	25.3	25.3	20.0	112	0.1	20	W515002	16-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	11.8	11.6	10.7	106	1.8	20	W515002	16-Apr-15	
EPA 200.7	Sodium	mg/L	85.5	85.6	19.0	101	0.1	20	W515002	16-Apr-15	
EPA 200.8	Antimony	mg/L	0.0262	0.0262	0.0250	99.4	0.0	20	W515035	14-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0239	0.0237	0.0250	95.5	0.8	20	W515035	14-Apr-15	
EPA 200.8	Barium	mg/L	0.0842	0.0851	0.0250	91.3	1.1	20	W515035	14-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0227	0.0226	0.0250	91.0	0.8	20	W515035	14-Apr-15	
EPA 200.8	Boron	mg/L	0.175	0.177	0.0250	81.3	1.3	20	W515035	14-Apr-15	M3
EPA 200.8	Cadmium	mg/L	0.0238	0.0238	0.0250	92.9	0.0	20	W515035	14-Apr-15	
EPA 200.8	Chromium	mg/L	0.0235	0.0235	0.0250	94.1	0.1	20	W515035	14-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0232	0.0232	0.0250	92.8	0.0	20	W515035	14-Apr-15	
EPA 200.8	Copper	mg/L	0.0235	0.0236	0.0250	92.0	0.4	20	W515035	14-Apr-15	
EPA 200.8	Lead	mg/L	0.0235	0.0238	0.0250	94.1	1.1	20	W515035	14-Apr-15	
EPA 200.8	Manganese	mg/L	0.0373	0.0376	0.0250	95.0	0.7	20	W515035	14-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.666	0.673	0.0250	R > 4S	1.0	20	W515035	14-Apr-15	M3
EPA 200.8	Nickel	mg/L	0.0234	0.0234	0.0250	93.5	0.2	20	W515035	14-Apr-15	
EPA 200.8	Selenium	mg/L	0.0231	0.0232	0.0250	92.3	0.4	20	W515035	14-Apr-15	
EPA 200.8	Silver	mg/L	0.0244	0.0244	0.0250	97.7	0.1	20	W515035	14-Apr-15	
EPA 200.8	Thallium	mg/L	0.0237	0.0239	0.0250	94.7	1.0	20	W515035	14-Apr-15	
EPA 200.8	Uranium	mg/L	0.0262	0.0267	0.0250	100	2.0	20	W515035	14-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0244	0.0244	0.0250	97.5	0.0	20	W515035	14-Apr-15	
EPA 200.8	Zinc	mg/L	0.0892	0.0907	0.0250	92.4	1.7	20	W515035	14-Apr-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00097	0.00098	0.00100	97.0	1.0	20	W515023	08-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	0.102	0.100	102	0.0	20	W515062	07-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.605	0.599	0.500	105	1.1	20	W514251	03-Apr-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.74	2.78	2.50	109	1.5	20	W515154	09-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.8	49.3	50.0	98.9	1.1	20	W516096	14-Apr-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	32.5	32.9	3.00	R > 4S	1.2	20	W514256	03-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	6.10	6.09	2.00	91.9	0.2	20	W514256	03-Apr-15	
EPA 300.0	Nitrate as N	mg/L	2.09	2.06	2.00	105	1.5	20	W514256	03-Apr-15	
EPA 300.0	Nitrite as N	mg/L	1.90	1.88	2.00	94.9	0.9	20	W514256	03-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	50.2	50.7	10.0	97.4	0.9	20	W514256	03-Apr-15	D2

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0067**
Reported: 21-Apr-15 08:57

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Tuesday, May 12, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504308
Project Name:
Project Number: 5D0189

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/16/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504308

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met with the following exception:

Uranium-235 and -238 activity is reported in the associated method blank above the minimum detectable concentration value. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504308
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0189
Client PO Number: 15214

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-017040915	1504308-1		WATER	09-Apr-15	13:00

ALS

1504308

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SDO189

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAme
Address:
Phone Number:
FAX Number:
PO#: 15214

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection			Misc.		Preservative(s)							Analyses Required										Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, ø and 0. Thanks!	Date	Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	RAD 226/228 903.1/904	Gross AB 900.0	U 234/235/238	ASTM D3972								
(1) 1	NSH-017-040915	4/9/15	1300	CP	2	3			X					X	X	X									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
A Jacobson	4-13-15	1002	Eric Peter	4/16/15	1210
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1504308

Project Manager: JRK Initials: ECP Date: 4/16/15

1. Does this project require any special handling in addition to standard ALS procedures?			YES	NO
2. Are custody seals on shipping containers intact?	NONE		YES	NO
* 3. Are Custody seals on sample containers intact?	NONE		YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?			YES	NO
5. Are the COC and bottle labels complete and legible?			YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)			YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF		YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A		YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A		YES	NO
10. Is there sufficient sample for the requested analyses?			YES	NO
11. Were all samples placed in the proper containers for the requested analyses?			YES	NO
12. Are all samples within holding times for the requested analyses?			YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)			YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A		YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	Amount	YES	NO
16. Were the samples shipped on ice?			YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY		YES	NO

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

3) Custody seal was on the cooler which was packed inside a box for shipping. No custody seals on actual sample bottles.

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: 4-16-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

DWT: 15,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

11
-0

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4359 9654

BILLING: P/P

cooler inside box

Description: SUB-CONTRACT

-1

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

RRD R 0215

Client: SVL Analytical
Project: 5D0189
Sample ID: NSH-017040915
Legal Location:
Collection Date: 4/9/2015 13:00

Date: *12-May-15*
Work Order: 1504308
Lab ID: 1504308-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **4/21/2015**	PrepBy: **DKL**
GROSS ALPHA	**12.9 (+/- 2.8)**		**2**	**pCi/l**	NA	4/24/2015 14:33
GROSS BETA	**8.2 (+/- 2.2)**		**2.9**	**pCi/l**	NA	4/24/2015 14:33
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **4/28/2015**	PrepBy: **TDE**
Tracer: U-232	*73.3*		*30-110*	*%REC*	DL = NA	5/4/2015 07:54
U-234	**7.5 (+/- 1.4)**		**0.1**	**pCi/l**	NA	5/4/2015 07:54
U-235	**0.36 (+/- 0.15)**		**0.04**	**pCi/l**	NA	5/4/2015 07:54
U-238	**7.1 (+/- 1.3)**		**0.1**	**pCi/l**	NA	5/4/2015 07:54
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/4/2015**	PrepBy: **PJW**
Ra-226	0.79 (+/- 0.29)	LT	0.11	pCi/l	NA	5/11/2015 12:36
Carr: BARIUM	*94.2*		*40-110*	*%REC*	DL = NA	5/11/2015 12:36
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/22/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.23)	U	0.49	pCi/l	NA	4/27/2015 10:28
Carr: BARIUM	*94.2*		*40-110*	*%REC*	DL = NA	4/27/2015 10:28

Client:	SVL Analytical	**Date:**	*12-May-15*
Project:	5D0189	**Work Order:**	1504308
Sample ID:	NSH-017040915	**Lab ID:**	1504308-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/9/2015 13:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504308
Project: 5D0189

Date: *5/12/2015 3:43:*

QC BATCH REPORT

Batch ID: **RE150504-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150504-1** Units: **pCi/l** Analysis Date: **5/11/2015 12:36**
Client ID: Run ID: **RE150504-1A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.4 (+/- 7.4)	0.2	30.71		95.7	67-120					P
Carr: BARIUM	30210		32820		92.1	40-110					

LCSD Sample ID: **RE150504-1** Units: **pCi/l** Analysis Date: **5/11/2015 12:36**
Client ID: Run ID: **RE150504-1A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	28.7 (+/- 7.3)	0.1	30.71		93.5	67-120		29.4	0.07	2.1	P
Carr: BARIUM	30450		32790		92.9	40-110		30210			

MB Sample ID: **RE150504-1** Units: **pCi/l** Analysis Date: **5/11/2015 12:36**
Client ID: Run ID: **RE150504-1A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.137									U
Carr: BARIUM	30350		32790		92.6	40-110					

The following samples were analyzed in this batch: 1504308-1

Client: SVL Analytical
Work Order: 1504308
Project: 5D0189

QC BATCH REPORT

Batch ID: **AS150423-1-5** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 07:53**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.58 (+/- 0.81)	0.04	4.416		104	82-122					P
U-238	5.19 (+/- 0.91)	0.03	4.585		113	78-126					P
Tracer: U-232	3.48	0.05	4.168		83.5	30-110					

LCSD Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 07:53**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.5 (+/- 0.78)	0.04	4.416		102	82-122		4.58	0.07	2.1	P
U-238	4.74 (+/- 0.82)	0.04	4.585		103	78-126		5.19	0.4	2.1	P
Tracer: U-232	4.02	0.05	4.168		96.5	30-110		3.48			

MB Sample ID: **AS150423-1** Units: **pCi/l** Analysis Date: **5/4/2015 15:01**
Client ID: Run ID: **AS150423-1UR** Prep Date: **4/28/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.015									U
U-235	0.013 (+/- 0.01)	0.005									B3
U-238	0.019 (+/- 0.013)	0.015									B3
Tracer: U-232	3.91	0.02	4.168		93.8	30-110					

The following samples were analyzed in this batch: 1504308-1

Client: SVL Analytical
Work Order: 1504308
Project: 5D0189

QC BATCH REPORT

Batch ID: **AB150421-2-6** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150421-2** Units: **pCi/l** Analysis Date: **4/24/2015 08:46**

Client ID: Run ID: **AB150421-2A** Prep Date: **4/21/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	217 (+/- 36)	3	224.3		96.6	70-130					P
GROSS BETA	195 (+/- 32)	6	204.1		95.5	70-130					P,M3

MB Sample ID: **AB150421-2** Units: **pCi/l** Analysis Date: **4/23/2015 14:33**

Client ID: Run ID: **AB150421-2A** Prep Date: **4/21/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.63									U
GROSS BETA	ND	1.06									U

The following samples were analyzed in this batch: 1504308-1 1504352-3

Client: SVL Analytical
Work Order: 1504308
Project: 5D0189

QC BATCH REPORT

Batch ID: **RA150422-2-3** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150422-2** Units: **pCi/l** Analysis Date: **4/27/2015 10:28**
Client ID: Run ID: **RA150422-2A** Prep Date: **4/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7.3 (+/- 1.8)	0.5	7.836		93.7	70-130					P
Carr: BARIUM	30210		32820		92.1	40-110					

LCSD Sample ID: **RA150422-2** Units: **pCi/l** Analysis Date: **4/27/2015 10:28**
Client ID: Run ID: **RA150422-2A** Prep Date: **4/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7.8 (+/- 1.9)	0.5	7.836		99	70-130		7.3	0.2	2.1	P
Carr: BARIUM	30450		32790		92.9	40-110		30210			

MB Sample ID: **RA150422-2** Units: **pCi/l** Analysis Date: **4/27/2015 10:28**
Client ID: Run ID: **RA150422-2A** Prep Date: **4/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.47									U
Carr: BARIUM	30350		32790		92.6	40-110					

The following samples were analyzed in this batch: 1504308-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015 10:45 AM
Client Sample ID	NSH-017-040915	**Sampling Time**	1:00 PM		
Matrix	Water	**Sample Location**	W5D0189-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichloroethane	0.41	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	J
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Benzene	2.84	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	NSH-017-040915	**Sampling Time**	1:00 PM			
Matrix	Water	**Sample Location**	W5D0189-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Naphthalene	0.19	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	J
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015 10:45 AM
Client Sample ID	NSH-017-040915	**Sampling Time**	1:00 PM		
Matrix	Water	**Sample Location**	W5D0189-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Toluene	0.46	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	J
Total Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150414039-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.0	70-130
Bromofluorobenzene	EPA 524.3	94.8	70-130
Toluene-d8	EPA 524.3	97.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001A	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	NSH-017-040915 DUPLICATE	**Sampling Time**	1:00 PM			
Matrix	Water	**Sample Location**	W5D0189-01			
Comments	Duplicate analyzed at client request					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichloroethane	0.39	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	J
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	4/23/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Benzene	2.99	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001A	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	NSH-017-040915 DUPLICATE	**Sampling Time**	1:00 PM			
Matrix	Water	**Sample Location**	W5D0189-01			
Comments	Duplicate analyzed at client request					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Naphthalene	0.19	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	J
n-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001A	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	NSH-017-040915 DUPLICATE	**Sampling Time**	1:00 PM			
Matrix	Water	**Sample Location**	W5D0189-01			
Comments	Duplicate analyzed at client request					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Toluene	0.41	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	J
Total Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150414039-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.2	70-130
Bromofluorobenzene	EPA 524.3	97.0	70-130
Toluene-d8	EPA 524.3	98.2	70-130

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-002	**Sampling Date**	4/10/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0189-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Acetone	27.9	ug/L	0.5	2.5	4/22/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-002	**Sampling Date**	4/10/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0189-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-002	**Sampling Date**	4/10/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5D0189-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150414039-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.2	70-130
Bromofluorobenzene	EPA 524.3	93.8	70-130
Toluene-d8	EPA 524.3	97.4	70-130

Authorized Signature

John Coddington, Lab Manager

J	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.85	ug/L	10	98.5	70-130	4/21/2015	4/21/2015
Toluene	9.88	ug/L	10	98.8	70-130	4/21/2015	4/21/2015
Tetrachloroethene	10.1	ug/L	10	101.0	70-130	4/21/2015	4/21/2015
o-Xylene	9.48	ug/L	10	94.8	70-130	4/21/2015	4/21/2015
Ethylbenzene	9.73	ug/L	10	97.3	70-130	4/21/2015	4/21/2015
Chlorobenzene	9.83	ug/L	10	98.3	70-130	4/21/2015	4/21/2015
Benzene	10.0	ug/L	10	100.0	70-130	4/21/2015	4/21/2015
1,1-Dichloroethene	10.1	ug/L	10	101.0	70-130	4/21/2015	4/21/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150413005-018	Trichloroethene	0.50	10.0	ug/L	10	95.0	64-147	4/21/2015	4/21/2015
150413005-018	Toluene	ND	10.4	ug/L	10	104.0	71-142	4/21/2015	4/21/2015
150413005-018	Tetrachloroethene	ND	9.01	ug/L	10	90.1	57-150	4/21/2015	4/21/2015
150413005-018	o-Xylene	ND	10.1	ug/L	10	101.0	74-136	4/21/2015	4/21/2015
150413005-018	Ethylbenzene	ND	10.4	ug/L	10	104.0	70-135	4/21/2015	4/21/2015
150413005-018	Chlorobenzene	ND	10.2	ug/L	10	102.0	71-129	4/21/2015	4/21/2015
150413005-018	Benzene	ND	10.4	ug/L	10	104.0	72-139	4/21/2015	4/21/2015
150413005-018	1,1-Dichloroethene	ND	10.6	ug/L	10	106.0	54-160	4/21/2015	4/21/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.1	ug/L	10	96.0	1.0	0-25	4/21/2015	4/21/2015
Toluene	10.8	ug/L	10	108.0	3.8	0-25	4/21/2015	4/21/2015
Tetrachloroethene	9.05	ug/L	10	90.5	0.4	0-25	4/21/2015	4/21/2015
o-Xylene	9.96	ug/L	10	99.6	1.4	0-25	4/21/2015	4/21/2015
Ethylbenzene	9.99	ug/L	10	99.9	4.0	0-25	4/21/2015	4/21/2015
Chlorobenzene	9.98	ug/L	10	99.8	2.2	0-25	4/21/2015	4/21/2015
Benzene	10.6	ug/L	10	106.0	1.9	0-25	4/21/2015	4/21/2015
1,1-Dichloroethene	10.6	ug/L	10	106.0	0.0	0-25	4/21/2015	4/21/2015

Method Blank

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Quality Control Data

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
2-Butanone	ND	ug/L	0.5	4/21/2015	4/21/2015
2-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
4-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
Acetone	ND	ug/L	2.5	4/21/2015	4/21/2015
Acrylonitrile	ND	ug/L	0.5	4/21/2015	4/21/2015
Benzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromochloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromodichloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromoform	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Carbon disulfide	ND	ug/L	0.5	4/21/2015	4/21/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/21/2015	4/21/2015
Chlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloroform	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
Dibromochloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Dibromomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Diethyl ether	ND	ug/L	0.5	4/21/2015	4/21/2015
Ethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/21/2015	4/21/2015
Iodomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Isopropylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
m+p-Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
Methylene chloride	ND	ug/L	0.5	4/21/2015	4/21/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/21/2015	4/21/2015
Naphthalene	ND	ug/L	0.5	4/21/2015	4/21/2015
n-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
n-Propylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
o-Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
p-isopropyltoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
sec-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Styrene	ND	ug/L	0.5	4/21/2015	4/21/2015
tert-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Tetrachloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
Toluene	ND	ug/L	0.5	4/21/2015	4/21/2015
Total Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/21/2015	4/21/2015
Trichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
Trichlorofluoromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Vinyl Chloride	ND	ug/L	0.5	4/21/2015	4/21/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Sample Number	150414039-001	**Sampling Date**	4/9/2015	**Date/Time Received**	4/14/2015	10:45 AM
Client Sample ID	NSH-017-040915	**Sampling Time**	1:00 PM	**Extraction Date**	4/15/2015	
Matrix	Water	**Sample Location**	W5D0189-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Naphthalene	0.0836	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	4/23/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150414039-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	96.2	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.09	ug/L	5	81.8	62-139	4/14/2015	4/24/2015
Acenaphthene	3.99	ug/L	5	79.8	70-135	4/14/2015	4/24/2015
Acenaphthylene	3.86	ug/L	5	77.2	67-121	4/14/2015	4/24/2015
Anthracene	3.94	ug/L	5	78.8	63-113	4/14/2015	4/24/2015
Benzo(ghi)perylene	4.01	ug/L	5	80.2	71-141	4/14/2015	4/24/2015
Benzo[a]anthracene	4.53	ug/L	5	90.6	71-142	4/14/2015	4/24/2015
Benzo[a]pyrene	4.17	ug/L	5	83.4	71-143	4/14/2015	4/24/2015
2-Methylnaphthalene	4.75	ug/L	5	95.0	56-128	4/14/2015	4/24/2015
Benzo[k]fluoranthene	4.20	ug/L	5	84.0	69-149	4/14/2015	4/24/2015
Pyrene	4.12	ug/L	5	82.4	69-119	4/14/2015	4/24/2015
Dibenz[a,h]anthracene	4.17	ug/L	5	83.4	68-138	4/14/2015	4/24/2015
Fluoranthene	4.27	ug/L	5	85.4	67-120	4/14/2015	4/24/2015
Fluorene	4.17	ug/L	5	83.4	60-116	4/14/2015	4/24/2015
Indeno[1,2,3-cd]pyrene	4.06	ug/L	5	81.2	68-140	4/14/2015	4/24/2015
Naphthalene	4.12	ug/L	5	82.4	51-122	4/14/2015	4/24/2015
Phenanthrene	4.13	ug/L	5	82.6	71-126	4/14/2015	4/24/2015
Benzo[b]fluoranthene	4.28	ug/L	5	85.6	68-148	4/14/2015	4/24/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.38	ug/L	5	87.6	6.8	0-50	4/14/2015	4/24/2015
Acenaphthene	4.20	ug/L	5	84.0	5.1	0-50	4/14/2015	4/24/2015
Acenaphthylene	4.08	ug/L	5	81.6	5.5	0-50	4/14/2015	4/24/2015
Anthracene	4.15	ug/L	5	83.0	5.2	0-50	4/14/2015	4/24/2015
Benzo(ghi)perylene	4.39	ug/L	5	87.8	9.0	0-50	4/14/2015	4/24/2015
Benzo[a]anthracene	4.80	ug/L	5	96.0	5.8	0-50	4/14/2015	4/24/2015
Benzo[a]pyrene	4.30	ug/L	5	86.0	3.1	0-50	4/14/2015	4/24/2015
2-Methylnaphthalene	5.20	ug/L	5	104.0	9.0	0-50	4/14/2015	4/24/2015
Benzo[k]fluoranthene	4.43	ug/L	5	88.6	5.3	0-50	4/14/2015	4/24/2015
Pyrene	4.45	ug/L	5	89.0	7.7	0-50	4/14/2015	4/24/2015
Dibenz[a,h]anthracene	4.58	ug/L	5	91.6	9.4	0-50	4/14/2015	4/24/2015
Fluoranthene	4.56	ug/L	5	91.2	6.6	0-50	4/14/2015	4/24/2015
Fluorene	4.42	ug/L	5	88.4	5.8	0-50	4/14/2015	4/24/2015
Indeno[1,2,3-cd]pyrene	4.48	ug/L	5	89.6	9.8	0-50	4/14/2015	4/24/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150414039
Project Name: SVL #W5D0189

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.40	ug/L	5	88.0	6.6	0-50	4/14/2015	4/24/2015
Phenanthrene	4.34	ug/L	5	86.8	5.0	0-50	4/14/2015	4/24/2015
Benzo[b]fluoranthene	4.56	ug/L	5	91.2	6.3	0-50	4/14/2015	4/24/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/14/2015	4/24/2015
Acenaphthene	ND	ug/L	0.01	4/14/2015	4/24/2015
Acenaphthylene	ND	ug/L	0.01	4/14/2015	4/24/2015
Anthracene	ND	ug/L	0.01	4/14/2015	4/24/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/14/2015	4/24/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/14/2015	4/24/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/14/2015	4/24/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/14/2015	4/24/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/14/2015	4/24/2015
Chrysene	ND	ug/L	0.01	4/14/2015	4/24/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/14/2015	4/24/2015
Fluoranthene	ND	ug/L	0.01	4/14/2015	4/24/2015
Fluorene	ND	ug/L	0.01	4/14/2015	4/24/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/14/2015	4/24/2015
Naphthalene	ND	ug/L	0.01	4/14/2015	4/24/2015
Phenanthrene	ND	ug/L	0.01	4/14/2015	4/24/2015
Pyrene	ND	ug/L	0.01	4/14/2015	4/24/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150414039
Order Date: 4/14/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0189
Comment:

Sample #: 150414039-001 **Customer Sample #:** NSH-017-040915

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/9/2015
Quantity: 4 **Date Received:** 4/14/2015 10:45:00 AM **Time Collected:** 1:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	4/24/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	4/24/2015	***Normal (~10 Days)***

Sample #: 150414039-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/10/2015
Quantity: 1 **Date Received:** 4/14/2015 10:45:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	4/24/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	4.5
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0189

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.0°C

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley And Aldrich
Contact: Lauren Candreva
Address: 400 E. Van Buren St. Suite 545, Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N. 44th St. Suite 300, Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Analyses Required: Metals (dissolved)	Silica (dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-017-040915	4/9/15	13:00	CP	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals + Silica sample was Field Filtered with a 0.45 µm disposable groundwater Filter capsule with HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									
6																									SHIPPED UPS AIR
7																									TRACKING NUMBER:
8																									1Z 9X9 989 23 1001
9																									263 1
10																									

Relinquished by:	Date: 4-9-15	Time: 13:35	Received by:	Date: 4-9-15	Time: 1335
Relinquished by: S. Jacobson	Date: 4-13-15	Time: 1323	Received by:	Date: 4/10/15	Time: 10:00

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-017-040915	W5D0189-01	Ground Water	09-Apr-15 13:00	CP	03-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Client Sample ID: **NSH-017-040915**
SVL Sample ID: **W5D0189-01 (Ground Water)**

Sampled: 09-Apr-15 13:00
Received: 03-Apr-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W516008	AS	04/23/15 16:04	U
EPA 200.7	**Calcium**	49.7	mg/L	0.040	0.029		W516008	AS	04/23/15 16:04	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W516008	AS	04/23/15 16:04	U
EPA 200.7	**Magnesium**	13.2	mg/L	0.20	0.11		W516008	AS	04/23/15 16:04	
EPA 200.7	**Potassium**	1.69	mg/L	0.50	0.17		W516008	AS	04/23/15 16:04	
EPA 200.7	**Silica (SiO2)**	37.0	mg/L	0.17	0.12		W516008	AS	04/23/15 16:04	
EPA 200.7	**Sodium**	38.4	mg/L	0.50	0.05		W516008	AS	04/23/15 16:04	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W517220	KWH	04/27/15 08:53	U
EPA 200.8	**Arsenic**	0.00123	mg/L	0.00300	0.00027		W517220	KWH	04/27/15 08:47	J
EPA 200.8	**Barium**	0.131	mg/L	0.00100	0.000099		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Beryllium**	0.00022	mg/L	0.00020	0.000048		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Boron**	0.0496	mg/L	0.0050	0.0012		W517220	KWH	04/27/15 08:53	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W517220	KWH	04/27/15 08:47	U
EPA 200.8	**Chromium**	0.0043	mg/L	0.0015	0.0004		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Cobalt**	0.00009	mg/L	0.00100	0.000054		W517220	KWH	04/27/15 08:47	J
EPA 200.8	**Copper**	0.0122	mg/L	0.00100	0.00015		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Lead**	0.00036	mg/L	0.00300	0.000031		W517220	KWH	04/27/15 08:47	J
EPA 200.8	**Manganese**	0.000900	mg/L	0.00100	0.000025		W517220	KWH	04/27/15 08:47	J
EPA 200.8	**Molybdenum**	0.0177	mg/L	0.00100	0.00009		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Nickel**	0.0016	mg/L	0.0010	0.0004		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Selenium**	0.0011	mg/L	0.0030	0.0006		W517220	KWH	04/27/15 08:53	J
EPA 200.8	**Silver**	0.000031	mg/L	0.000100	0.000021		W517220	KWH	04/27/15 08:47	J
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W517220	KWH	04/27/15 08:47	U
EPA 200.8	**Uranium**	0.0197	mg/L	0.00100	0.000014		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Vanadium**	0.0030	mg/L	0.0030	0.0009		W517220	KWH	04/27/15 08:47	
EPA 200.8	**Zinc**	0.311	mg/L	0.0050	0.0010		W517220	KWH	04/27/15 08:47	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W516152	STA	04/16/15 11:45	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	203	mg/L as CaCO3	1.0			W515201	DKS	04/13/15 08:21	
SM 2320B	**Bicarbonate**	203	mg/L as CaCO3	1.0			W515201	DKS	04/13/15 08:21	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W515201	DKS	04/13/15 08:21	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W515201	DKS	04/13/15 08:21	U
SM 2510 B	**Specific conductance**	554	µmhos/cm	5.00			W515196	RS	04/13/15 09:35	
SM 2540 C	**Total Diss. Solids**	317	mg/L	10			W515194	JDM	04/13/15 16:30	
SM 4500 H B	**pH @21.0°C**	7.68	pH Units				W515201	DKS	04/13/15 08:21	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W517021	VRH	04/20/15 15:03	U
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W515200	SM	04/10/15 15:59	H6,U
SM 4500-S-F	Sulfide	< 0.27	mg/L	1.00	0.27		W516032	SM	04/13/15 15:17	U
SM 5310B	**Total Organic Carbon**	0.26	mg/L	1.00	0.24		W516096	MCB	04/15/15 10:14	J

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Client Sample ID: **NSH-017-040915**
SVL Sample ID: **W5D0189-01 (Ground Water)**

Sampled: 09-Apr-15 13:00
Received: 03-Apr-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	34.6	mg/L	2.00	0.56	10	W515198	MCE	04/10/15 13:17	D2
EPA 300.0	**Fluoride**	2.65	mg/L	0.100	0.022		W515198	MCE	04/10/15 13:06	
EPA 300.0	**Nitrate as N**	2.04	mg/L	0.050	0.008		W515198	MCE	04/10/15 13:06	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W515198	MCE	04/10/15 13:06	U
EPA 300.0	**Sulfate as SO4**	15.0	mg/L	0.30	0.05		W515198	MCE	04/10/15 13:06	

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.30 meq/L Anion Sum: 5.63 meq/L C/A Balance: -3.06 % Calculated TDS: 323 TDS/cTDS: 0.98 TDS/eC: 0.57

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W516008	23-Apr-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W516008	23-Apr-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W516008	23-Apr-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W516008	23-Apr-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W516008	23-Apr-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W516008	23-Apr-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W516008	23-Apr-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517220	27-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517220	27-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517220	27-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517220	27-Apr-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W517220	27-Apr-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517220	27-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517220	27-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517220	27-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517220	27-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517220	27-Apr-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517220	27-Apr-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W517220	27-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517220	27-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517220	27-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517220	27-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517220	27-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517220	27-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517220	27-Apr-15	U
EPA 200.8	Zinc	mg/L	0.0010	0.0010	0.0050	W517220	27-Apr-15	J
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W516152	16-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.93		1.0	W515201	13-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.93		1.0	W515201	13-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W515201	13-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W515201	13-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W515194	13-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W517021	20-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W515200	10-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.27	0.27	1.00	W516032	13-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W516096	14-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W516096	15-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W515198	10-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W515198	10-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W515198	10-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W515198	10-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W515198	10-Apr-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.97	1.00	97.3	85 - 115	W516008	23-Apr-15	
EPA 200.7	Calcium	mg/L	18.2	20.0	91.1	85 - 115	W516008	23-Apr-15	
EPA 200.7	Iron	mg/L	9.14	10.0	91.4	85 - 115	W516008	23-Apr-15	
EPA 200.7	Magnesium	mg/L	18.2	20.0	91.0	85 - 115	W516008	23-Apr-15	
EPA 200.7	Potassium	mg/L	19.3	20.0	96.4	85 - 115	W516008	23-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	9.85	10.7	92.0	85 - 115	W516008	23-Apr-15	
EPA 200.7	Sodium	mg/L	17.5	19.0	92.3	85 - 115	W516008	23-Apr-15	
EPA 200.8	Antimony	mg/L	0.0256	0.0250	102	85 - 115	W517220	27-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0254	0.0250	102	85 - 115	W517220	27-Apr-15	
EPA 200.8	Barium	mg/L	0.0255	0.0250	102	85 - 115	W517220	27-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0273	0.0250	109	85 - 115	W517220	27-Apr-15	
EPA 200.8	Boron	mg/L	0.0267	0.0250	107	85 - 115	W517220	27-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0265	0.0250	106	85 - 115	W517220	27-Apr-15	
EPA 200.8	Chromium	mg/L	0.0250	0.0250	100	85 - 115	W517220	27-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0253	0.0250	101	85 - 115	W517220	27-Apr-15	
EPA 200.8	Copper	mg/L	0.0260	0.0250	104	85 - 115	W517220	27-Apr-15	
EPA 200.8	Lead	mg/L	0.0251	0.0250	100	85 - 115	W517220	27-Apr-15	
EPA 200.8	Manganese	mg/L	0.0253	0.0250	101	85 - 115	W517220	27-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0253	0.0250	101	85 - 115	W517220	27-Apr-15	
EPA 200.8	Nickel	mg/L	0.0257	0.0250	103	85 - 115	W517220	27-Apr-15	
EPA 200.8	Selenium	mg/L	0.0260	0.0250	104	85 - 115	W517220	27-Apr-15	
EPA 200.8	Silver	mg/L	0.0258	0.0250	103	85 - 115	W517220	27-Apr-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0250	100	85 - 115	W517220	27-Apr-15	
EPA 200.8	Uranium	mg/L	0.0248	0.0250	99.0	85 - 115	W517220	27-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0253	0.0250	101	85 - 115	W517220	27-Apr-15	
EPA 200.8	Zinc	mg/L	0.0264	0.0250	106	85 - 115	W517220	27-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00509	0.00500	102	85 - 115	W516152	16-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	101	99.3	102	85 - 115	W515201	13-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	101	99.3	102	85 - 115	W515201	13-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	311	306	102	90 - 110	W515196	13-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.153	0.150	102	90 - 110	W517021	20-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.773	0.786	98.3	90 - 110	W515200	10-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.50	2.50	100	80 - 120	W516032	13-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	31.0	34.3	90.3	90 - 110	W516096	14-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	31.2	34.3	90.9	90 - 110	W516096	14-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.83	3.00	94.3	90 - 110	W515198	10-Apr-15	
EPA 300.0	Fluoride	mg/L	1.91	2.00	95.7	90 - 110	W515198	10-Apr-15	
EPA 300.0	Nitrate as N	mg/L	1.99	2.01	98.9	90 - 110	W515198	10-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.52	2.51	100	90 - 110	W515198	10-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.72	10.0	97.2	90 - 110	W515198	10-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	201	203	1.0	20	W515201	13-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	201	203	1.0	20	W515201	13-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W515201	13-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W515201	13-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	549	554	0.8	20	W515196	13-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	229	225	1.8	10	W515194	13-Apr-15	
SM 4500 H B	pH	pH Units	7.61	7.68	0.9	20	W515201	13-Apr-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	0.99	<0.036	1.00	99.2	70 - 130	W516008	23-Apr-15	
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W516008	23-Apr-15	
EPA 200.7	Calcium	mg/L	67.7	49.7	20.0	90.2	70 - 130	W516008	23-Apr-15	
EPA 200.7	Calcium	mg/L	55.7	37.0	20.0	93.4	70 - 130	W516008	23-Apr-15	
EPA 200.7	Iron	mg/L	9.39	<0.026	10.0	93.9	70 - 130	W516008	23-Apr-15	
EPA 200.7	Iron	mg/L	9.87	<0.026	10.0	98.7	70 - 130	W516008	23-Apr-15	
EPA 200.7	Magnesium	mg/L	32.0	13.2	20.0	94.2	70 - 130	W516008	23-Apr-15	
EPA 200.7	Magnesium	mg/L	20.5	0.48	20.0	100	70 - 130	W516008	23-Apr-15	
EPA 200.7	Potassium	mg/L	21.9	1.69	20.0	101	70 - 130	W516008	23-Apr-15	
EPA 200.7	Potassium	mg/L	21.5	0.41	20.0	106	70 - 130	W516008	23-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	47.4	37.0	10.7	97.1	70 - 130	W516008	23-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	13.2	2.72	10.7	97.5	70 - 130	W516008	23-Apr-15	
EPA 200.7	Sodium	mg/L	56.6	38.4	19.0	95.8	70 - 130	W516008	23-Apr-15	
EPA 200.7	Sodium	mg/L	19.4	0.53	19.0	99.4	70 - 130	W516008	23-Apr-15	
EPA 200.8	Antimony	mg/L	0.0263	<0.00019	0.0250	105	70 - 130	W517220	27-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0294	0.00123	0.0250	113	70 - 130	W517220	27-Apr-15	
EPA 200.8	Barium	mg/L	0.150	0.131	0.0250	72.9	70 - 130	W517220	27-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0257	0.00022	0.0250	102	70 - 130	W517220	27-Apr-15	
EPA 200.8	Boron	mg/L	0.0760	0.0496	0.0250	106	70 - 130	W517220	27-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0256	<0.000072	0.0250	102	70 - 130	W517220	27-Apr-15	
EPA 200.8	Chromium	mg/L	0.0282	0.0043	0.0250	95.6	70 - 130	W517220	27-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0241	0.00009	0.0250	96.1	70 - 130	W517220	27-Apr-15	
EPA 200.8	Copper	mg/L	0.0355	0.0122	0.0250	93.2	70 - 130	W517220	27-Apr-15	
EPA 200.8	Lead	mg/L	0.0225	0.00036	0.0250	88.6	70 - 130	W517220	27-Apr-15	
EPA 200.8	Manganese	mg/L	0.0248	0.000900	0.0250	95.7	70 - 130	W517220	27-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0421	0.0177	0.0250	97.9	70 - 130	W517220	27-Apr-15	
EPA 200.8	Nickel	mg/L	0.0247	0.0016	0.0250	92.6	70 - 130	W517220	27-Apr-15	
EPA 200.8	Selenium	mg/L	0.0282	0.0011	0.0250	109	70 - 130	W517220	27-Apr-15	
EPA 200.8	Silver	mg/L	0.0236	0.000031	0.0250	94.4	70 - 130	W517220	27-Apr-15	
EPA 200.8	Thallium	mg/L	0.0220	<0.000026	0.0250	88.1	70 - 130	W517220	27-Apr-15	
EPA 200.8	Uranium	mg/L	0.0403	0.0197	0.0250	82.5	70 - 130	W517220	27-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0276	0.0030	0.0250	98.4	70 - 130	W517220	27-Apr-15	
EPA 200.8	Zinc	mg/L	0.327	0.311	0.0250	R > 4S	70 - 130	W517220	27-Apr-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00105	<0.00004	0.00100	105	70 - 130	W516152	16-Apr-15	
EPA 245.1	Mercury	mg/L	0.00102	<0.00004	0.00100	102	70 - 130	W516152	16-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	<0.0025	0.100	102	75 - 125	W517021	20-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.511	<0.0058	0.500	102	75 - 125	W515200	10-Apr-15	H6

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-S-F	Sulfide	mg/L	2.46	<0.27	2.50	98.4	80 - 120	W516032	13-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.3	0.40	50.0	97.8	80 - 120	W516096	14-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	9.48	6.43	3.00	102	90 - 110	W515198	10-Apr-15	
EPA 300.0	Fluoride	mg/L	2.04	0.101	2.00	96.8	90 - 110	W515198	10-Apr-15	
EPA 300.0	Nitrate as N	mg/L	4.60	2.65	2.00	97.7	90 - 110	W515198	10-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.17	<0.014	2.00	108	90 - 110	W515198	10-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	20.5	10.4	10.0	102	90 - 110	W515198	10-Apr-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	0.99	0.99	1.00	98.7	0.6	20	W516008	23-Apr-15	
EPA 200.7	Calcium	mg/L	67.8	67.7	20.0	90.4	0.1	20	W516008	23-Apr-15	
EPA 200.7	Iron	mg/L	9.37	9.39	10.0	93.7	0.2	20	W516008	23-Apr-15	
EPA 200.7	Magnesium	mg/L	31.9	32.0	20.0	93.8	0.2	20	W516008	23-Apr-15	
EPA 200.7	Potassium	mg/L	22.0	21.9	20.0	101	0.3	20	W516008	23-Apr-15	
EPA 200.7	Silica (SiO2)	mg/L	47.2	47.4	10.7	95.0	0.5	20	W516008	23-Apr-15	
EPA 200.7	Sodium	mg/L	56.6	56.6	19.0	95.8	0.0	20	W516008	23-Apr-15	
EPA 200.8	Antimony	mg/L	0.0263	0.0263	0.0250	105	0.3	20	W517220	27-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0246	0.0294	0.0250	93.4	17.9	20	W517220	27-Apr-15	
EPA 200.8	Barium	mg/L	0.124	0.150	0.0250	R > 4S	19.2	20	W517220	27-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0207	0.0257	0.0250	81.7	21.6	20	W517220	27-Apr-15	
EPA 200.8	Boron	mg/L	0.0755	0.0760	0.0250	104	0.7	20	W517220	27-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0213	0.0256	0.0250	85.3	18.2	20	W517220	27-Apr-15	
EPA 200.8	Chromium	mg/L	0.0232	0.0282	0.0250	75.6	19.5	20	W517220	27-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0202	0.0241	0.0250	80.5	17.6	20	W517220	27-Apr-15	
EPA 200.8	Copper	mg/L	0.0295	0.0355	0.0250	69.2	18.5	20	W517220	27-Apr-15	
EPA 200.8	Lead	mg/L	0.0189	0.0225	0.0250	74.2	17.4	20	W517220	27-Apr-15	
EPA 200.8	Manganese	mg/L	0.0208	0.0248	0.0250	79.6	17.6	20	W517220	27-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0351	0.0421	0.0250	69.7	18.3	20	W517220	27-Apr-15	
EPA 200.8	Nickel	mg/L	0.0206	0.0247	0.0250	76.1	18.2	20	W517220	27-Apr-15	
EPA 200.8	Selenium	mg/L	0.0278	0.0282	0.0250	107	1.6	20	W517220	27-Apr-15	
EPA 200.8	Silver	mg/L	0.0196	0.0236	0.0250	78.2	18.8	20	W517220	27-Apr-15	
EPA 200.8	Thallium	mg/L	0.0191	0.0220	0.0250	76.6	14.0	20	W517220	27-Apr-15	
EPA 200.8	Uranium	mg/L	0.0340	0.0403	0.0250	57.2	17.0	20	W517220	27-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0226	0.0276	0.0250	78.4	19.9	20	W517220	27-Apr-15	
EPA 200.8	Zinc	mg/L	0.274	0.327	0.0250	R > 4S	17.8	20	W517220	27-Apr-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00105	0.00105	0.00100	105	0.0	20	W516152	16-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	0.102	0.100	102	0.0	20	W517021	20-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.514	0.511	0.500	103	0.6	20	W515200	10-Apr-15	H6
SM 4500-S-F	Sulfide	mg/L	2.50	2.46	2.50	100	1.6	20	W516032	13-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.8	49.3	50.0	98.9	1.1	20	W516096	14-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0189**
Reported: 27-Apr-15 13:25

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	9.54	9.48	3.00	104	0.6	20	W515198	10-Apr-15	
EPA 300.0	Fluoride	mg/L	2.10	2.04	2.00	99.9	3.0	20	W515198	10-Apr-15	
EPA 300.0	Nitrate as N	mg/L	4.70	4.60	2.00	102	2.0	20	W515198	10-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.22	2.17	2.00	111	2.4	20	W515198	10-Apr-15	M1
EPA 300.0	Sulfate as SO4	mg/L	21.0	20.5	10.0	106	2.2	20	W515198	10-Apr-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Wednesday, May 20, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504489
Project Name:
Project Number: 5D0331

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/24/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504489

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504489
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0331
Client PO Number: 15230

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-018-041615	1504489-1		WATER	16-Apr-15	14:00

ALS

1504469

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #
TEMP on Receipt: 5D0331

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAme
Address:
Phone Number:
FAX Number:
PO#: 15230

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection: Date	Collection: Time	Collected by: (Init.)	Misc.: Matrix Type (From Table 1)	Misc.: No. of Containers	Preservative(s): Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross AIB 900.0	RAD 226/228 903.1/904	U 234/235/238	ASTM D3972	Rush Instructions (Days)	Comments
1	NSH-018-041615	4/16/15	1400	SN	2	3			X					X	X	X			Call Chris Meyer With Questions
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by	Date	Time	Received by	Date	Time
S Jacobson	4-20-15	0946	[illegible]	04-24-15	12:15

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SUL Analytical Workorder No: 1504489

Project Manager: JRK Initials: SDM Date: 04-24-15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	0							
DOT Survey/ Acceptance Information — External µR/hr reading:	16							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-24-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

DWT: 15,11,16

1504489 16 -0

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4377 8586

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31 63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.
BRD R 0215

Client: SVL Analytical
Project: 5D0331
Sample ID: NSH-018-041615
Legal Location:
Collection Date: 4/16/2015 14:00

Date: *20-May-15*
Work Order: 1504489
Lab ID: 1504489-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **5/13/2015**	PrepBy: **DKL**
GROSS ALPHA	ND (+/- 1.2)	U	2.5	pCi/l	NA	5/15/2015 08:46
GROSS BETA	3.9 (+/- 1.8)	LT	3.2	pCi/l	NA	5/15/2015 08:46
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **5/12/2015**	PrepBy: **TDE**
Tracer: U-232	*80.8*		*30-110*	*%REC*	DL = NA	5/17/2015 12:56
U-234	**0.81 (+/- 0.22)**		**0.07**	**pCi/l**	NA	5/17/2015 12:56
U-235	0.056 (+/- 0.051)	LT	0.03	pCi/l	NA	5/17/2015 12:56
U-238	**0.51 (+/- 0.17)**		**0.09**	**pCi/l**	NA	5/17/2015 12:56
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/4/2015**	PrepBy: **PJW**
Ra-226	0.19 (+/- 0.12)	LT	0.1	pCi/l	NA	5/11/2015 12:36
Carr: BARIUM	*92.9*		*40-110*	*%REC*	DL = NA	5/11/2015 12:36
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/27/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.2)	U	0.47	pCi/l	NA	5/4/2015 10:00
Carr: BARIUM	*92.9*		*40-110*	*%REC*	DL = NA	5/4/2015 10:00

Client:	SVL Analytical	**Date:**	*20-May-15*
Project:	5D0331	**Work Order:**	1504489
Sample ID:	NSH-018-041615	**Lab ID:**	1504489-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/16/2015 14:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504489
Project: 5D0331

Date: *5/20/2015 2:51:*

QC BATCH REPORT

Batch ID: **RE150504-2-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	26.3 (+/- 6.7)	0.3	30.71		85.7	67-120					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27.7 (+/- 7)	0.3	30.71		90.1	67-120		26.3	0.1	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.19									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504489-1

Client: SVL Analytical
Work Order: 1504489
Project: 5D0331

QC BATCH REPORT

Batch ID: **AS150512-5-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:42**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.23 (+/- 0.75)	0.04	4.416		95.8	82-122					P
U-238	4.89 (+/- 0.86)	0.03	4.585		107	78-126					P
Tracer: U-232	3.54	0.06	4.167		85	30-110					

MB Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:56**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.041									U
U-235	ND	0.016									U
U-238	ND	0.041									U
Tracer: U-232	3.35	0.05	4.167		80.4	30-110					

The following samples were analyzed in this batch: 1504489-1

Client: SVL Analytical
Work Order: 1504489
Project: 5D0331

QC BATCH REPORT

Batch ID: **AB150513-1-4** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 12:54**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	225 (+/- 37)	3	224.3		100	70-130					P
GROSS BETA	219 (+/- 36)	6	203.8		107	70-130					P,M3

MB Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 15:12**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.56									U
GROSS BETA	ND	1.02									U

The following samples were analyzed in this batch: 1504489-1

Client: SVL Analytical
Work Order: 1504489
Project: 5D0331

QC BATCH REPORT

Batch ID: **RA150427-1-1** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.1 (+/- 1.9)	0.6	7.818		104	70-130					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	9.2 (+/- 2.2)	0.5	7.818		117	70-130		8.1	0.4	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.48									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504489-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	NSH-018-041615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0331-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	NSH-018-041615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0331-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	NSH-018-041615	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0331-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Toluene	0.51	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150421030-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.4	70-130
Bromofluorobenzene	EPA 524.3	93.4	70-130
Toluene-d8	EPA 524.3	96.2	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001A	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015	11:30 AM
Client Sample ID	NSH-018-041615 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0331-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	4/23/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001A	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015	11:30 AM
Client Sample ID	NSH-018-041615 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0331-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001A	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015	11:30 AM
Client Sample ID	NSH-018-041615 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5D0331-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Toluene	0.54	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150421030-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.8	70-130
Bromofluorobenzene	EPA 524.3	97.2	70-130
Toluene-d8	EPA 524.3	97.6	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-002	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0331-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Acetone	39.3	ug/L	0.5	2.5	4/23/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-002	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0331-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-002	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015 11:30 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0331-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/23/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150421030-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.0	70-130
Bromofluorobenzene	EPA 524.3	95.0	70-130
Toluene-d8	EPA 524.3	95.4	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.85	ug/L	10	98.5	70-130	4/21/2015	4/21/2015
Toluene	9.88	ug/L	10	98.8	70-130	4/21/2015	4/21/2015
Tetrachloroethene	10.1	ug/L	10	101.0	70-130	4/21/2015	4/21/2015
o-Xylene	9.48	ug/L	10	94.8	70-130	4/21/2015	4/21/2015
Ethylbenzene	9.73	ug/L	10	97.3	70-130	4/21/2015	4/21/2015
Chlorobenzene	9.83	ug/L	10	98.3	70-130	4/21/2015	4/21/2015
Benzene	10.0	ug/L	10	100.0	70-130	4/21/2015	4/21/2015
1,1-Dichloroethene	10.1	ug/L	10	101.0	70-130	4/21/2015	4/21/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150413005-018	Trichloroethene	0.50	10.0	ug/L	10	95.0	64-147	4/21/2015	4/21/2015
150413005-018	Toluene	ND	10.4	ug/L	10	104.0	71-142	4/21/2015	4/21/2015
150413005-018	Tetrachloroethene	ND	9.01	ug/L	10	90.1	57-150	4/21/2015	4/21/2015
150413005-018	o-Xylene	ND	10.1	ug/L	10	101.0	74-136	4/21/2015	4/21/2015
150413005-018	Ethylbenzene	ND	10.4	ug/L	10	104.0	70-135	4/21/2015	4/21/2015
150413005-018	Chlorobenzene	ND	10.2	ug/L	10	102.0	71-129	4/21/2015	4/21/2015
150413005-018	Benzene	ND	10.4	ug/L	10	104.0	72-139	4/21/2015	4/21/2015
150413005-018	1,1-Dichloroethene	ND	10.6	ug/L	10	106.0	54-160	4/21/2015	4/21/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.1	ug/L	10	96.0	1.0	0-25	4/21/2015	4/21/2015
Toluene	10.8	ug/L	10	108.0	3.8	0-25	4/21/2015	4/21/2015
Tetrachloroethene	9.05	ug/L	10	90.5	0.4	0-25	4/21/2015	4/21/2015
o-Xylene	9.96	ug/L	10	99.6	1.4	0-25	4/21/2015	4/21/2015
Ethylbenzene	9.99	ug/L	10	99.9	4.0	0-25	4/21/2015	4/21/2015
Chlorobenzene	9.98	ug/L	10	99.8	2.2	0-25	4/21/2015	4/21/2015
Benzene	10.6	ug/L	10	106.0	1.9	0-25	4/21/2015	4/21/2015
1,1-Dichloroethene	10.6	ug/L	10	106.0	0.0	0-25	4/21/2015	4/21/2015

Method Blank

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Quality Control Data

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,1-dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/21/2015
2-Butanone	ND	ug/L	0.5	4/21/2015	4/21/2015
2-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
4-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
Acetone	ND	ug/L	2.5	4/21/2015	4/21/2015
Acrylonitrile	ND	ug/L	0.5	4/21/2015	4/21/2015
Benzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromochloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromodichloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromoform	ND	ug/L	0.5	4/21/2015	4/21/2015
Bromomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Carbon disulfide	ND	ug/L	0.5	4/21/2015	4/21/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/21/2015	4/21/2015
Chlorobenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloroethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloroform	ND	ug/L	0.5	4/21/2015	4/21/2015
Chloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015

Comments:

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Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
Dibromochloromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Dibromomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Diethyl ether	ND	ug/L	0.5	4/21/2015	4/21/2015
Ethylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/21/2015	4/21/2015
Iodomethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Isopropylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
m+p-Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
Methylene chloride	ND	ug/L	0.5	4/21/2015	4/21/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/21/2015	4/21/2015
Naphthalene	ND	ug/L	0.5	4/21/2015	4/21/2015
n-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
n-Propylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
o-Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
p-isopropyltoluene	ND	ug/L	0.5	4/21/2015	4/21/2015
sec-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Styrene	ND	ug/L	0.5	4/21/2015	4/21/2015
tert-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/21/2015
Tetrachloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
Toluene	ND	ug/L	0.5	4/21/2015	4/21/2015
Total Xylene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/21/2015
trans-1-4-Dichloro-2-butene	ND	ug/L	0.5	4/21/2015	4/21/2015
Trichloroethene	ND	ug/L	0.5	4/21/2015	4/21/2015
Trichlorofluoromethane	ND	ug/L	0.5	4/21/2015	4/21/2015
Vinyl Chloride	ND	ug/L	0.5	4/21/2015	4/21/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Sample Number	150421030-001	**Sampling Date**	4/16/2015	**Date/Time Received**	4/21/2015	11:30 AM
Client Sample ID	NSH-018-041615	**Sampling Time**	2:00 PM	**Extraction Date**	4/23/15	
Matrix	Water	**Sample Location**	W5D0331-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150421030-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	100.0	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	5.28	ug/L	5	105.6	62-139	4/23/2015	4/28/2015
Acenaphthene	4.85	ug/L	5	97.0	70-135	4/23/2015	4/28/2015
Acenaphthylene	4.66	ug/L	5	93.2	67-121	4/23/2015	4/28/2015
Anthracene	5.20	ug/L	5	104.0	63-113	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.37	ug/L	5	87.4	71-141	4/23/2015	4/28/2015
Benzo[a]anthracene	5.04	ug/L	5	100.8	71-142	4/23/2015	4/28/2015
Benzo[a]pyrene	4.33	ug/L	5	86.6	71-143	4/23/2015	4/28/2015
2-Methylnaphthalene	4.99	ug/L	5	99.8	56-128	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.90	ug/L	5	98.0	69-149	4/23/2015	4/28/2015
Pyrene	5.43	ug/L	5	108.6	69-119	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.35	ug/L	5	87.0	68-138	4/23/2015	4/28/2015
Fluoranthene	5.42	ug/L	5	108.4	67-120	4/23/2015	4/28/2015
Fluorene	4.97	ug/L	5	99.4	60-116	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.27	ug/L	5	85.4	68-140	4/23/2015	4/28/2015
Naphthalene	4.08	ug/L	5	81.6	51-122	4/23/2015	4/28/2015
Phenanthrene	5.25	ug/L	5	105.0	71-126	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.65	ug/L	5	93.0	68-148	4/23/2015	4/28/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	5.33	ug/L	5	106.6	0.9	0-50	4/23/2015	4/28/2015
Acenaphthene	4.92	ug/L	5	98.4	1.4	0-50	4/23/2015	4/28/2015
Acenaphthylene	4.79	ug/L	5	95.8	2.8	0-50	4/23/2015	4/28/2015
Anthracene	5.22	ug/L	5	104.4	0.4	0-50	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.40	ug/L	5	88.0	0.7	0-50	4/23/2015	4/28/2015
Benzo[a]anthracene	4.96	ug/L	5	99.2	1.6	0-50	4/23/2015	4/28/2015
Benzo[a]pyrene	4.36	ug/L	5	87.2	0.7	0-50	4/23/2015	4/28/2015
2-Methylnaphthalene	5.18	ug/L	5	103.6	3.7	0-50	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.87	ug/L	5	97.4	0.6	0-50	4/23/2015	4/28/2015
Pyrene	5.29	ug/L	5	105.8	2.6	0-50	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.28	ug/L	5	85.6	1.6	0-50	4/23/2015	4/28/2015
Fluoranthene	5.27	ug/L	5	105.4	2.8	0-50	4/23/2015	4/28/2015
Fluorene	5.08	ug/L	5	101.6	2.2	0-50	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.30	ug/L	5	86.0	0.7	0-50	4/23/2015	4/28/2015

Comments:

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421030
Project Name: SVL #W5D0331

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.29	ug/L	5	85.8	5.0	0-50	4/23/2015	4/28/2015
Phenanthrene	5.22	ug/L	5	104.4	0.6	0-50	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.67	ug/L	5	93.4	0.4	0-50	4/23/2015	4/28/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Chrysene	ND	ug/L	0.01	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluorene	ND	ug/L	0.01	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Naphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Phenanthrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150421030
Order Date: 4/21/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0331
Comment:

Sample #: 150421030-001 **Customer Sample #:** NSH-018-041615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/16/2015
Quantity: 4 **Date Received:** 4/21/2015 11:30:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/1/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/1/2015	***Normal (~10 Days)***

Sample #: 150421030-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/16/2015
Quantity: 1 **Date Received:** 4/21/2015 11:30:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/1/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	1.1
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

WFD0331

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.6

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: Haley & Aldrich
Contact: Lauren Candreva
Address: 400 E Van Buren St
Suite 545, Phoenix, AZ
Phone Number: 602-760-2450 85004
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N. 44th St Ste 300
Phoenix AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn AC	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's 524.3	Radio Chem, Isotopes	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, ø and O. Thanks!																								
1	NSH-018-041615	4/16/15	1400	SN	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica Sample was field filtered w/ a 0.45 um Disposable graduate filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									
6																									
7																									
8																									
9																									
10																									

UPS Tracking
1Z 9X8 989 23 1001 262 2

Relinquished by:	Date: 4/16/15	Time: 1430	Received by:	Date: 4/16/15	Time: 1430
Relinquished by:	Date: 4-20-15	Time: 1238	Received by:	Date: 4-17-15	Time: 9:50

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-018-041615	W5D0331-01	Ground Water	16-Apr-15 14:00	JN	17-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Client Sample ID: **NSH-018-041615**
SVL Sample ID: **W5D0331-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 16-Apr-15 14:00
Received: 17-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W517007	AS	05/04/15 15:18	U
EPA 200.7	**Calcium**	49.6	mg/L	0.040	0.029		W517007	AS	05/04/15 15:18	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W517007	AS	05/04/15 15:18	U
EPA 200.7	**Magnesium**	9.62	mg/L	0.20	0.11		W517007	AS	05/04/15 15:18	
EPA 200.7	**Potassium**	1.26	mg/L	0.50	0.17		W517007	AS	05/04/15 15:18	
EPA 200.7	**Silica (SiO2)**	33.5	mg/L	0.17	0.12		W517007	AS	05/04/15 15:18	
EPA 200.7	**Sodium**	25.9	mg/L	0.50	0.05		W517007	AS	05/04/15 15:18	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W517216	KWH	04/30/15 10:57	U
EPA 200.8	**Arsenic**	0.00061	mg/L	0.00300	0.00027		W517216	KWH	04/30/15 08:35	J
EPA 200.8	**Barium**	0.0710	mg/L	0.00100	0.000099		W517216	KWH	04/30/15 07:03	
EPA 200.8	**Beryllium**	0.00017	mg/L	0.00020	0.000048		W517216	KWH	04/30/15 07:03	J
EPA 200.8	**Boron**	0.0330	mg/L	0.0050	0.0012		W517216	KWH	04/30/15 07:03	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W517216	KWH	04/30/15 07:03	U
EPA 200.8	**Chromium**	0.0041	mg/L	0.0015	0.0004		W517216	KWH	04/30/15 07:03	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W517216	KWH	04/30/15 07:03	J
EPA 200.8	**Copper**	0.00298	mg/L	0.00100	0.00015		W517216	KWH	04/30/15 08:35	
EPA 200.8	Lead	< 0.000031	mg/L	0.00300	0.000031		W517216	KWH	04/30/15 07:03	U
EPA 200.8	**Manganese**	0.00308	mg/L	0.00100	0.000025		W517216	KWH	04/30/15 08:35	
EPA 200.8	**Molybdenum**	0.0226	mg/L	0.00100	0.00009		W517216	KWH	04/30/15 07:03	
EPA 200.8	**Nickel**	0.0013	mg/L	0.0010	0.0004		W517216	KWH	04/30/15 07:03	
EPA 200.8	**Selenium**	0.0022	mg/L	0.0030	0.0006		W517216	KWH	04/30/15 07:03	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W517216	KWH	04/30/15 07:03	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W517216	KWH	04/30/15 08:35	U
EPA 200.8	**Uranium**	0.00140	mg/L	0.00100	0.000014		W517216	KWH	04/30/15 07:03	
EPA 200.8	**Vanadium**	0.0027	mg/L	0.0030	0.0009		W517216	KWH	04/30/15 07:03	J
EPA 200.8	**Zinc**	0.280	mg/L	0.0050	0.0010		W517216	KWH	04/30/15 08:35	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W517065	STA	04/22/15 11:51	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	176	mg/L as CaCO3	1.0			W516112	DKS	04/17/15 14:21	
SM 2320B	**Bicarbonate**	176	mg/L as CaCO3	1.0			W516112	DKS	04/17/15 14:21	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W516112	DKS	04/17/15 14:21	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W516112	DKS	04/17/15 14:21	U
SM 2510 B	**Specific conductance**	443	µmhos/cm	5.00			W516232	RS	04/20/15 06:25	
SM 2540 C	**Total Diss. Solids**	262	mg/L	10			W516233	RS	04/20/15 11:00	
SM 4500 H B	**pH @21.0°C**	7.90	pH Units				W516112	DKS	04/17/15 14:21	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W518090	VRH	04/28/15 13:20	U
SM 4500-P-E	**Orthophosphate as P**	0.006	mg/L	0.010	0.006		W516223	MCB	04/17/15 13:57	H6,J
SM 4500-S-F	**Sulfide**	0.36	mg/L	1.00	0.27		W517179	SM	04/22/15 15:24	J
SM 5310B	**Total Organic Carbon**	0.37	mg/L	1.00	0.24		W518028	SM	04/29/15 21:00	J

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AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Client Sample ID: **NSH-018-041615**
SVL Sample ID: **W5D0331-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 16-Apr-15 14:00
Received: 17-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	19.8	mg/L	2.00	0.56	10	W516238	MCE	04/22/15 14:16	D2,M3
EPA 300.0	**Fluoride**	1.84	mg/L	0.100	0.022		W516238	DT	04/17/15 18:40	
EPA 300.0	**Nitrate as N**	2.07	mg/L	0.050	0.008		W516238	DT	04/17/15 18:40	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W516238	DT	04/17/15 18:40	U
EPA 300.0	**Sulfate as SO4**	17.4	mg/L	0.30	0.05		W516238	MCE	04/22/15 14:05	M1

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.44 meq/L Anion Sum: 4.68 meq/L C/A Balance: -2.67 % Calculated TDS: 274 TDS/cTDS: 0.96 TDS/eC: 0.59

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W517007	04-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W517007	04-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W517007	04-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W517007	04-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W517007	04-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W517007	04-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W517007	04-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517216	30-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517216	30-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517216	30-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517216	30-Apr-15	U
EPA 200.8	Boron	mg/L	0.0014	0.0012	0.0050	W517216	30-Apr-15	J
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517216	30-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517216	30-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517216	30-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517216	30-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517216	30-Apr-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517216	30-Apr-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W517216	30-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517216	30-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517216	30-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517216	30-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517216	30-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517216	30-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517216	30-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W517216	30-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W517065	22-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.45		1.0	W516112	17-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.45		1.0	W516112	17-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W516112	17-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W516112	17-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W516233	20-Apr-15	
SM 4500 H B	pH	pH Units	0.00			W516112	17-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W518090	28-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W516223	17-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W517179	22-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W518028	29-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	0.07	0.06	0.20	W516238	17-Apr-15	J
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W516238	17-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W516238	17-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W516238	17-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W516238	17-Apr-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.04	1.00	104	85 - 115	W517007	04-May-15	
EPA 200.7	Calcium	mg/L	20.0	20.0	100	85 - 115	W517007	04-May-15	
EPA 200.7	Iron	mg/L	9.95	10.0	99.5	85 - 115	W517007	04-May-15	
EPA 200.7	Magnesium	mg/L	20.0	20.0	100	85 - 115	W517007	04-May-15	
EPA 200.7	Potassium	mg/L	20.7	20.0	103	85 - 115	W517007	04-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	98.1	85 - 115	W517007	04-May-15	
EPA 200.7	Sodium	mg/L	19.0	19.0	100	85 - 115	W517007	04-May-15	
EPA 200.8	Antimony	mg/L	0.0245	0.0250	98.0	85 - 115	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0279	0.0250	112	85 - 115	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0269	0.0250	107	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0273	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0260	0.0250	104	85 - 115	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0259	0.0250	103	85 - 115	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.0277	0.0250	111	85 - 115	W517216	30-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00513	0.00500	103	85 - 115	W517065	22-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	107	99.3	108	85 - 115	W516112	17-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	107	99.3	108	85 - 115	W516112	17-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	317	306	103	90 - 110	W516232	20-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.161	0.150	107	90 - 110	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.861	0.786	110	90 - 110	W516223	17-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.52	2.50	101	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	34.4	34.3	100	90 - 110	W518028	29-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.91	3.00	97.1	90 - 110	W516238	17-Apr-15	
EPA 300.0	Fluoride	mg/L	1.98	2.00	99.2	90 - 110	W516238	17-Apr-15	
EPA 300.0	Nitrate as N	mg/L	2.06	2.01	102	90 - 110	W516238	17-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.60	2.51	103	90 - 110	W516238	17-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.67	10.0	96.7	90 - 110	W516238	17-Apr-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	173	159	7.9	20	W516112	17-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	0	123	UDL	20	W516112	17-Apr-15	R2B,U
SM 2320B	Carbonate	mg/L as CaCO3	155	36.5	124.0	20	W516112	17-Apr-15	R2B
SM 2320B	Hydroxide	mg/L as CaCO3	17.8	0.00	<RL	20	W516112	17-Apr-15	R2B
SM 2510 B	Specific conductance	µmhos/cm	442	443	0.3	20	W516232	20-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	1080	1080	0.7	10	W516233	20-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	899	905	0.7	10	W516233	20-Apr-15	
SM 4500 H B	pH	pH Units	9.62	8.82	8.7	20	W516112	17-Apr-15	R1B

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.03	<0.036	1.00	103	70 - 130	W517007	04-May-15	
EPA 200.7	Calcium	mg/L	70.1	49.6	20.0	102	70 - 130	W517007	04-May-15	
EPA 200.7	Iron	mg/L	10.0	<0.026	10.0	100	70 - 130	W517007	04-May-15	
EPA 200.7	Magnesium	mg/L	30.1	9.62	20.0	103	70 - 130	W517007	04-May-15	
EPA 200.7	Potassium	mg/L	22.7	1.26	20.0	107	70 - 130	W517007	04-May-15	
EPA 200.7	Silica (SiO2)	mg/L	44.4	33.5	10.7	102	70 - 130	W517007	04-May-15	
EPA 200.7	Sodium	mg/L	45.6	25.9	19.0	103	70 - 130	W517007	04-May-15	
EPA 200.8	Antimony	mg/L	0.0244	<0.00019	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0287	0.00154	0.0250	109	70 - 130	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0961	0.0723	0.0250	95.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.00032	0.0250	104	70 - 130	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0695	0.0478	0.0250	86.7	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	<0.000072	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0304	0.0046	0.0250	103	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0256	0.00007	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0451	0.0210	0.0250	96.6	70 - 130	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0234	0.00007	0.0250	93.2	70 - 130	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0461	0.0218	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.104	0.0782	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0011	0.0250	100	70 - 130	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0346	0.0028	0.0250	127	70 - 130	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	<0.000021	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0235	<0.000026	0.0250	94.1	70 - 130	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0248	0.00149	0.0250	93.3	70 - 130	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0290	0.0027	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.297	0.280	0.0250	R > 4S	70 - 130	W517216	30-Apr-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00106	<0.00004	0.00100	106	70 - 130	W517065	22-Apr-15	
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	98.6	70 - 130	W517065	22-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	<0.0025	0.100	111	75 - 125	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.528	0.006	0.500	104	75 - 125	W516223	17-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.76	<0.39	2.50	96.0	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.6	0.37	50.0	98.4	80 - 120	W518028	29-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	23.6	19.8	3.00	R > 4S	90 - 110	W516238	22-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	3.71	1.84	2.00	93.5	90 - 110	W516238	17-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0331**
Reported: 05-May-15 16:01

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Nitrate as N	mg/L	4.07	2.07	2.00	100	90 - 110	W516238	17-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.01	<0.014	2.00	101	90 - 110	W516238	17-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	28.6	17.4	10.0	111	90 - 110	W516238	22-Apr-15	M1

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.07	1.03	1.00	107	3.5	20	W517007	04-May-15	
EPA 200.7	Calcium	mg/L	69.5	70.1	20.0	99.6	0.8	20	W517007	04-May-15	
EPA 200.7	Iron	mg/L	10.2	10.0	10.0	102	1.7	20	W517007	04-May-15	
EPA 200.7	Magnesium	mg/L	30.0	30.1	20.0	102	0.3	20	W517007	04-May-15	
EPA 200.7	Potassium	mg/L	23.1	22.7	20.0	109	1.9	20	W517007	04-May-15	
EPA 200.7	Silica (SiO2)	mg/L	47.1	44.4	10.7	127	5.9	20	W517007	04-May-15	
EPA 200.7	Sodium	mg/L	45.5	45.6	19.0	103	0.2	20	W517007	04-May-15	
EPA 200.8	Antimony	mg/L	0.0250	0.0244	0.0250	100	2.7	20	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0301	0.0287	0.0250	114	4.9	20	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0936	0.0961	0.0250	85.3	2.7	20	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.0263	0.0250	104	0.2	20	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0721	0.0695	0.0250	97.1	3.7	20	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	0.0263	0.0250	105	0.0	20	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0304	0.0250	101	2.0	20	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0252	0.0256	0.0250	100	1.9	20	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0443	0.0451	0.0250	93.3	1.9	20	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0225	0.0234	0.0250	89.8	3.7	20	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0450	0.0461	0.0250	92.9	2.5	20	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.103	0.104	0.0250	97.7	0.9	20	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0261	0.0250	99.2	0.7	20	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0352	0.0346	0.0250	130	1.8	20	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	0.0254	0.0250	102	0.1	20	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0241	0.0235	0.0250	96.5	2.5	20	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0236	0.0248	0.0250	88.4	5.0	20	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0283	0.0290	0.0250	102	2.5	20	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.302	0.297	0.0250	89.8	1.7	20	W517216	30-Apr-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00097	0.00106	0.00100	96.8	9.2	20	W517065	22-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	0.111	0.100	111	0.0	20	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.518	0.528	0.500	102	1.9	20	W516223	17-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.64	2.76	2.50	91.2	4.4	20	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	48.6	49.6	50.0	96.5	2.0	20	W518028	29-Apr-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	23.0	23.6	3.00	107	2.8	20	W516238	22-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	3.75	3.71	2.00	95.7	1.2	20	W516238	17-Apr-15	
EPA 300.0	Nitrate as N	mg/L	4.12	4.07	2.00	102	1.1	20	W516238	17-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.06	2.01	2.00	103	2.4	20	W516238	17-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	28.9	28.6	10.0	114	1.1	20	W516238	22-Apr-15	M1

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.	**Project Name: Gunnison Copper 2015**
2999 N. 44th St. #300	Work Order: **W5D0331**
Phoenix, AZ 85018	Reported: 05-May-15 16:01

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
R1B	RPD exceeded the method acceptance limit.
R2B	RPD exceeded the laboratory acceptance limit.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Wednesday, May 20, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504482
Project Name:
Project Number: 5D0369

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/24/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504482

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504482
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0369
Client PO Number: 15240

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-095-042015	1504482-1		WATER	20-Apr-15	14:30

ALS

1504482

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SD0369

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAme
Address:
Phone Number:
FAX Number:
PO#: 15240

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: Az

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross a/b 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																	Please call Chris Meyer with Questions
1	NSH-09S-042015	4/20/15	1430	JN	2	3			X					X	X	X		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
L Jacobson	4-21-15	1244	Scott Malley	4-24-15	930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Analytical Workorder No: 1504482

Project Manager: JRK Initials: SDM Date: 4-24-15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	10							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-24-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

23 LBS

1 OF 1

DWT: 24,15,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

10
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4419 0593

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.
RRD R 0215

1504402

Client: SVL Analytical
Project: 5D0369
Sample ID: NSH-095-042015
Legal Location:
Collection Date: 4/20/2015 14:30

Date: *20-May-15*
Work Order: 1504482
Lab ID: 1504482-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **5/13/2015**	PrepBy: **DKL**
GROSS ALPHA	**3.3 (+/- 1.5)**		**2.3**	**pCi/l**	NA	5/15/2015 15:09
GROSS BETA	**40.8 (+/- 7.1)**		**3.6**	**pCi/l**	NA	5/15/2015 15:09
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **5/12/2015**	PrepBy: **TDE**
Tracer: U-232	*73.2*		*30-110*	*%REC*	DL = NA	5/17/2015 12:56
U-234	**0.86 (+/- 0.25)**		**0.06**	**pCi/l**	NA	5/17/2015 12:56
U-235	ND (+/- 0.051)	U	0.105	pCi/l	NA	5/17/2015 12:56
U-238	**0.64 (+/- 0.21)**		**0.11**	**pCi/l**	NA	5/17/2015 12:56
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/4/2015**	PrepBy: **PJW**
Ra-226	**1.39 (+/- 0.45)**		**0.13**	**pCi/l**	NA	5/11/2015 12:36
Carr: BARIUM	*92.7*		*40-110*	*%REC*	DL = NA	5/11/2015 12:36
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/27/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.19)	U	0.44	pCi/l	NA	5/4/2015 10:00
Carr: BARIUM	*92.7*		*40-110*	*%REC*	DL = NA	5/4/2015 10:00

Client:	SVL Analytical	**Date:**	*20-May-15*
Project:	5D0369	**Work Order:**	1504482
Sample ID:	NSH-095-042015	**Lab ID:**	1504482-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/20/2015 14:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504482
Project: 5D0369

Date: *5/20/2015 2:00:*

QC BATCH REPORT

Batch ID: **RE150504-2-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	26.3 (+/- 6.7)	0.3	30.71		85.7	67-120					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27.7 (+/- 7)	0.3	30.71		90.1	67-120		26.3	0.1	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.19									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504482-1

Client: SVL Analytical
Work Order: 1504482
Project: 5D0369

QC BATCH REPORT

Batch ID: **AS150512-5-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:42**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.23 (+/- 0.75)	0.04	4.416		95.8	82-122					P
U-238	4.89 (+/- 0.86)	0.03	4.585		107	78-126					P
Tracer: U-232	3.54	0.06	4.167		85	30-110					

MB Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:56**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.041									U
U-235	ND	0.016									U
U-238	ND	0.041									U
Tracer: U-232	3.35	0.05	4.167		80.4	30-110					

The following samples were analyzed in this batch: 1504482-1

Client: SVL Analytical
Work Order: 1504482
Project: 5D0369

QC BATCH REPORT

Batch ID: **AB150513-1-4** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 12:54**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	225 (+/- 37)	3	224.3		100	70-130					P
GROSS BETA	219 (+/- 36)	6	203.8		107	70-130					P,M3

MB Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 15:12**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.56									U
GROSS BETA	ND	1.02									U

The following samples were analyzed in this batch: 1505095-1 1504482-1 1505095-2

Client: SVL Analytical
Work Order: 1504482
Project: 5D0369

QC BATCH REPORT

Batch ID: **RA150427-1-1** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.1 (+/- 1.9)	0.6	7.818		104	70-130					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	9.2 (+/- 2.2)	0.5	7.818		117	70-130		8.1	0.4	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.48									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504482-1

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-095-042015	W5D0369-01	Ground Water	20-Apr-15 14:30	JN	21-Apr-2015	
TRIP BLANK	W5D0369-02	Ground Water	20-Apr-15 00:00	JN	21-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

Case Narrative

05/04/15 HJG RPD exceeded method acceptance limit of ±0.1 for SM 4500 H+B pH.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Client Sample ID: **NSH-095-042015**
SVL Sample ID: **W5D0369-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 20-Apr-15 14:30
Received: 21-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W517195	AS	05/06/15 11:15	U
EPA 200.7	**Calcium**	39.4	mg/L	0.040	0.029		W517195	AS	05/06/15 11:15	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W517195	AS	05/06/15 11:15	U
EPA 200.7	**Magnesium**	9.40	mg/L	0.20	0.11		W517195	AS	05/06/15 11:15	
EPA 200.7	**Potassium**	1.97	mg/L	0.50	0.17		W517195	AS	05/06/15 11:15	
EPA 200.7	**Silica (SiO2)**	31.5	mg/L	0.17	0.12		W517195	AS	05/06/15 11:15	
EPA 200.7	**Sodium**	36.0	mg/L	0.50	0.05		W517195	AS	05/06/15 11:15	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W517216	KWH	04/30/15 10:52	U
EPA 200.8	**Arsenic**	0.00154	mg/L	0.00300	0.00027		W517216	KWH	04/30/15 08:30	J
EPA 200.8	**Barium**	0.0723	mg/L	0.00100	0.000099		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Beryllium**	0.00032	mg/L	0.00020	0.000048		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Boron**	0.0478	mg/L	0.0050	0.0012		W517216	KWH	04/30/15 06:56	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W517216	KWH	04/30/15 06:56	U
EPA 200.8	**Chromium**	0.0046	mg/L	0.0015	0.0004		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W517216	KWH	04/30/15 06:56	J
EPA 200.8	**Copper**	0.0210	mg/L	0.00100	0.00015		W517216	KWH	04/30/15 08:30	
EPA 200.8	**Lead**	0.00007	mg/L	0.00300	0.000031		W517216	KWH	04/30/15 06:56	J
EPA 200.8	**Manganese**	0.0218	mg/L	0.00100	0.000025		W517216	KWH	04/30/15 08:30	
EPA 200.8	**Molybdenum**	0.0782	mg/L	0.00100	0.00009		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Nickel**	0.0011	mg/L	0.0010	0.0004		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Selenium**	0.0028	mg/L	0.0030	0.0006		W517216	KWH	04/30/15 06:56	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W517216	KWH	04/30/15 06:56	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W517216	KWH	04/30/15 08:30	U
EPA 200.8	**Uranium**	0.00149	mg/L	0.00100	0.000014		W517216	KWH	04/30/15 06:56	
EPA 200.8	**Vanadium**	0.0027	mg/L	0.0030	0.0009		W517216	KWH	04/30/15 06:56	J
EPA 200.8	**Zinc**	0.280	mg/L	0.0050	0.0010		W517216	KWH	04/30/15 08:30	M3
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W518029	STA	04/28/15 13:13	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	150	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:34	
SM 2320B	**Bicarbonate**	150	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:34	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:34	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:34	U
SM 2510 B	**Specific conductance**	388	µmhos/cm	5.00			W517143	RS	04/22/15 07:40	
SM 2540 C	**Total Diss. Solids**	254	mg/L	10			W517146	RS	04/22/15 09:35	
SM 4500 H B	**pH @24.0°C**	7.93	pH Units				W517112	DKS	04/22/15 09:34	H5,R1
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W518090	VRH	04/28/15 13:42	U
SM 4500-P-E	**Orthophosphate as P**	0.006	mg/L	0.010	0.006		W517118	SM	04/21/15 15:21	H6,J
SM 4500-S-F	**Sulfide**	0.28	mg/L	1.00	0.27		W517179	SM	04/22/15 15:24	J
SM 5310B	**Total Organic Carbon**	0.31	mg/L	1.00	0.24		W518028	SM	04/29/15 21:13	J

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Client Sample ID: **NSH-095-042015**
SVL Sample ID: **W5D0369-01 (Ground Water)**

Sampled: 20-Apr-15 14:30
Received: 21-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	26.2	mg/L	2.00	0.56	10	W517100	MCE	04/21/15 16:06	D2,M3
EPA 300.0	**Fluoride**	3.75	mg/L	0.100	0.022		W517100	MCE	04/21/15 10:53	
EPA 300.0	**Nitrate as N**	1.22	mg/L	0.050	0.008		W517100	MCE	04/21/15 10:53	M1
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W517100	MCE	04/21/15 10:53	U
EPA 300.0	**Sulfate as SO4**	18.9	mg/L	0.30	0.05		W517100	MCE	04/21/15 10:53	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.37 meq/L Anion Sum: 4.42 meq/L C/A Balance: -0.50 % Calculated TDS: 263 TDS/cTDS: 0.97 TDS/eC: 0.65

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W517195	06-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W517195	06-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W517195	06-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W517195	06-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W517195	06-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W517195	06-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W517195	06-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517216	30-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517216	30-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517216	30-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517216	30-Apr-15	U
EPA 200.8	Boron	mg/L	0.0014	0.0012	0.0050	W517216	30-Apr-15	J
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517216	30-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517216	30-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517216	30-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517216	30-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517216	30-Apr-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517216	30-Apr-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W517216	30-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517216	30-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517216	30-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517216	30-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517216	30-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517216	30-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517216	30-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W517216	30-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W518029	28-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.25		1.0	W517112	22-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.25		1.0	W517112	22-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W517112	22-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W517112	22-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W517146	22-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W518090	28-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W517118	21-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W517179	22-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W518028	29-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W517100	21-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W517100	21-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W517100	21-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W517100	21-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W517100	21-Apr-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.04	1.00	104	85 - 115	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	19.8	20.0	99.2	85 - 115	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.99	10.0	99.9	85 - 115	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	20.2	20.0	101	85 - 115	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	20.8	20.0	104	85 - 115	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	98.4	85 - 115	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	19.1	19.0	101	85 - 115	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0245	0.0250	98.0	85 - 115	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0279	0.0250	112	85 - 115	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0269	0.0250	107	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0273	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0260	0.0250	104	85 - 115	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0259	0.0250	103	85 - 115	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.0277	0.0250	111	85 - 115	W517216	30-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00507	0.00500	101	85 - 115	W518029	28-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	103	85 - 115	W517112	22-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	103	85 - 115	W517112	22-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	296	306	96.8	90 - 110	W517143	22-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.161	0.150	107	90 - 110	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.766	0.786	97.5	90 - 110	W517118	21-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.52	2.50	101	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	34.4	34.3	100	90 - 110	W518028	29-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.93	3.00	97.8	90 - 110	W517100	21-Apr-15	
EPA 300.0	Fluoride	mg/L	1.95	2.00	97.5	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	1.97	2.01	97.9	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.58	2.51	103	90 - 110	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.84	10.0	98.4	90 - 110	W517100	21-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	149	150	0.8	20	W517112	22-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	149	150	0.8	20	W517112	22-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W517112	22-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W517112	22-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	386	388	0.6	20	W517143	22-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	251	250	0.4	10	W517146	22-Apr-15	
SM 4500 H B	pH	pH Units	7.81	7.93	1.5	20	W517112	22-Apr-15	R1

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.01	<0.036	1.00	101	70 - 130	W517195	06-May-15	
EPA 200.7	Aluminum	mg/L	1.02	<0.036	1.00	102	70 - 130	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	58.3	39.4	20.0	94.3	70 - 130	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	259	237	20.0	110	70 - 130	W517195	06-May-15	M3
EPA 200.7	Iron	mg/L	10.0	<0.026	10.0	100	70 - 130	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.75	<0.026	10.0	97.5	70 - 130	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	29.2	9.40	20.0	99.2	70 - 130	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	86.0	65.2	20.0	104	70 - 130	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	23.0	1.97	20.0	105	70 - 130	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	25.8	4.98	20.0	104	70 - 130	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	41.9	31.5	10.7	97.2	70 - 130	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.0	46.8	10.7	113	70 - 130	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	54.5	36.0	19.0	97.4	70 - 130	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	73.7	53.6	19.0	106	70 - 130	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0244	<0.00019	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0287	0.00154	0.0250	109	70 - 130	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0961	0.0723	0.0250	95.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.00032	0.0250	104	70 - 130	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0695	0.0478	0.0250	86.7	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	<0.000072	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0304	0.0046	0.0250	103	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0256	0.00007	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0451	0.0210	0.0250	96.6	70 - 130	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0234	0.00007	0.0250	93.2	70 - 130	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0461	0.0218	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.104	0.0782	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0011	0.0250	100	70 - 130	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0346	0.0028	0.0250	127	70 - 130	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	<0.000021	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0235	<0.000026	0.0250	94.1	70 - 130	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0248	0.00149	0.0250	93.3	70 - 130	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0290	0.0027	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.297	0.280	0.0250	R > 4S	70 - 130	W517216	30-Apr-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00105	<0.00004	0.00100	105	70 - 130	W518029	28-Apr-15	
EPA 245.1	Mercury	mg/L	0.00107	<0.00004	0.00100	107	70 - 130	W518029	28-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	<0.0025	0.100	111	75 - 125	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.494	<0.0058	0.500	98.9	75 - 125	W517118	21-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-S-F	Sulfide	mg/L	2.76	<0.39	2.50	96.0	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.6	0.37	50.0	98.4	80 - 120	W518028	29-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	30.1	26.2	3.00	R > 4S	90 - 110	W517100	21-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.83	3.75	2.00	104	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.38	1.22	2.00	108	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrite as N	mg/L	1.92	<0.014	2.00	95.9	90 - 110	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	29.5	18.9	10.0	106	90 - 110	W517100	21-Apr-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.01	1.01	1.00	101	0.3	20	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	56.9	58.3	20.0	87.6	2.3	20	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.81	10.0	10.0	98.1	1.9	20	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	28.5	29.2	20.0	95.5	2.5	20	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	22.5	23.0	20.0	103	1.9	20	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	40.9	41.9	10.7	88.2	2.3	20	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	53.2	54.5	19.0	90.4	2.5	20	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0250	0.0244	0.0250	100	2.7	20	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0301	0.0287	0.0250	114	4.9	20	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0936	0.0961	0.0250	85.3	2.7	20	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.0263	0.0250	104	0.2	20	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0721	0.0695	0.0250	97.1	3.7	20	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	0.0263	0.0250	105	0.0	20	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0304	0.0250	101	2.0	20	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0252	0.0256	0.0250	100	1.9	20	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0443	0.0451	0.0250	93.3	1.9	20	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0225	0.0234	0.0250	89.8	3.7	20	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0450	0.0461	0.0250	92.9	2.5	20	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.103	0.104	0.0250	97.7	0.9	20	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0261	0.0250	99.2	0.7	20	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0352	0.0346	0.0250	130	1.8	20	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	0.0254	0.0250	102	0.1	20	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0241	0.0235	0.0250	96.5	2.5	20	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0236	0.0248	0.0250	88.4	5.0	20	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0283	0.0290	0.0250	102	2.5	20	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.302	0.297	0.0250	89.8	1.7	20	W517216	30-Apr-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00107	0.00105	0.00100	107	1.9	20	W518029	28-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	0.111	0.100	111	0.0	20	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.498	0.494	0.500	99.6	0.7	20	W517118	21-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.64	2.76	2.50	91.2	4.4	20	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	48.6	49.6	50.0	96.5	2.0	20	W518028	29-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0369**
Reported: 21-May-15 15:04

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	29.5	30.1	3.00	R > 4S	2.1	20	W517100	21-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.88	5.83	2.00	106	0.8	20	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.43	3.38	2.00	111	1.5	20	W517100	21-Apr-15	M1
EPA 300.0	Nitrite as N	mg/L	1.97	1.92	2.00	98.5	2.6	20	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	29.9	29.5	10.0	110	1.3	20	W517100	21-Apr-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
R1	RPD exceeded the method acceptance limit. See case narrative.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-095-042015	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0369-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromoethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-hexanone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Acetone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-095-042015	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0369-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Methyl ethyl ketone (MEK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methyl isobutyl ketone (MIBK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methylene chloride	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-095-042015	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0369-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Toluene	0.51	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroflouromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Surrogate Data

Sample Number 150421045-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260B	107.2	70-130
4-Bromofluorobenzene	EPA 8260B	102.4	70-130
Toluene-d8	EPA 8260B	101.6	70-130

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0369-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromoethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-hexanone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Acetone	15.9	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0369-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Methyl ethyl ketone (MEK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methyl isobutyl ketone (MIBK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methylene chloride	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421045-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0369-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Toluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroflouromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Surrogate Data

Sample Number 150421045-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260B	106.0	70-130
4-Bromofluorobenzene	EPA 8260B	103.2	70-130
Toluene-d8	EPA 8260B	102.8	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.80	ug/L	10	98.0	72-125	4/21/2015	4/22/2015
Toluene	9.58	ug/L	10	95.8	76-123	4/21/2015	4/22/2015
Tetrachloroethene	9.19	ug/L	10	91.9	78-119	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	83-117	4/21/2015	4/22/2015
Ethylbenzene	9.95	ug/L	10	99.5	84-115	4/21/2015	4/22/2015
Chlorobenzene	10.0	ug/L	10	100.0	85-115	4/21/2015	4/22/2015
Benzene	9.71	ug/L	10	97.1	75-125	4/21/2015	4/22/2015
1,1-Dichloroethene	9.40	ug/L	10	94.0	68-127	4/21/2015	4/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.99	ug/L	10	99.9	1.9	0-20	4/21/2015	4/22/2015
Toluene	9.82	ug/L	10	98.2	2.5	0-20	4/21/2015	4/22/2015
Tetrachloroethene	9.78	ug/L	10	97.8	6.2	0-20	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	0.0	0-20	4/21/2015	4/22/2015
Ethylbenzene	10.0	ug/L	10	100.0	0.5	0-20	4/21/2015	4/22/2015
Chlorobenzene	9.86	ug/L	10	98.6	1.4	0-20	4/21/2015	4/22/2015
Benzene	9.93	ug/L	10	99.3	2.2	0-20	4/21/2015	4/22/2015
1,1-Dichloroethene	9.96	ug/L	10	99.6	5.8	0-20	4/21/2015	4/22/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150421045-001	Trichloroethene	ND	9.62	ug/L	10	96.2	56-143	4/21/2015	4/22/2015
150421045-001	Toluene	0.51	9.48	ug/L	10	89.7	66-136	4/21/2015	4/22/2015
150421045-001	Tetrachloroethene	ND	9.54	ug/L	10	95.4	53-149	4/21/2015	4/22/2015
150421045-001	o-Xylene	ND	9.45	ug/L	10	94.5	68-134	4/21/2015	4/22/2015
150421045-001	Ethylbenzene	ND	9.25	ug/L	10	92.5	70-137	4/21/2015	4/22/2015
150421045-001	Chlorobenzene	ND	9.22	ug/L	10	92.2	68-136	4/21/2015	4/22/2015
150421045-001	Benzene	ND	9.27	ug/L	10	92.7	63-139	4/21/2015	4/22/2015
150421045-001	1,1-Dichloroethene	ND	9.49	ug/L	10	94.9	59-144	4/21/2015	4/22/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromoethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
2-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
2-hexanone	ND	ug/L	2.5	4/21/2015	4/22/2015
4-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
Acetone	ND	ug/L	2.5	4/21/2015	4/22/2015
Acrylonitrile	ND	ug/L	0.5	4/21/2015	4/22/2015
Benzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromodichloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromoform	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon disulfide	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/21/2015	4/22/2015
Chlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroform	ND	ug/L	0.5	4/21/2015	4/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421045
Project Name: SVL #W5D0369

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Chloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Ethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/21/2015	4/22/2015
Isopropylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
m+p-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methylene chloride	ND	ug/L	2.5	4/21/2015	4/22/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/21/2015	4/22/2015
Naphthalene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Propylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
o-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
p-isopropyltoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
sec-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Styrene	ND	ug/L	0.5	4/21/2015	4/22/2015
tert-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Tetrachloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Toluene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroflouromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Vinyl Chloride	ND	ug/L	0.5	4/21/2015	4/22/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150421045
Order Date: 4/21/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0369
Comment:

Sample #: 150421045-001 **Customer Sample #:** NSH-095-042015

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 3 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:** 2:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 8260 SVL LIST	M	EPA 8260B	4/22/2015	***1 Day***

Sample #: 150421045-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 1 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 8260 SVL LIST	M	EPA 8260B	4/22/2015	***1 Day***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.7
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0369

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.2

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley + Aldrich
Contact: Lauren Cordrera
Address: 400 E Van Buren st Ste 545
Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44th st Ste 300
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#: 15241

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination:

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZNAC	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Radio Chem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-095-042015	4/20/15	1430	N	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals + Silica Sample was filtered w/ a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									Tracking #
6																									12 988 989 23 1001 261 3
7																									
8																									
9																									
10																									

Relinquished by:	Date: 4/20/15	Time: 1500	Received by:	Date: 4/20/15	Time: 1500
Relinquished by:	Date: 4-21-15	Time: 1147	Received by:	Date: 4-21-15	Time: 9:50

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421046
Project Name: SVL #W5D0369

Analytical Results Report

Sample Number	150421046-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-095-042015	**Sampling Time**	2:30 PM	**Extraction Date**	4/23/15
Matrix	Water	**Sample Location**	W5D0369-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150421046-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	91.5	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421046
Project Name: SVL #W5D0369

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	5.28	ug/L	5	105.6	62-139	4/23/2015	4/28/2015
Acenaphthene	4.85	ug/L	5	97.0	70-135	4/23/2015	4/28/2015
Acenaphthylene	4.66	ug/L	5	93.2	67-121	4/23/2015	4/28/2015
Anthracene	5.20	ug/L	5	104.0	63-113	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.37	ug/L	5	87.4	71-141	4/23/2015	4/28/2015
Benzo[a]anthracene	5.04	ug/L	5	100.8	71-142	4/23/2015	4/28/2015
Benzo[a]pyrene	4.33	ug/L	5	86.6	71-143	4/23/2015	4/28/2015
2-Methylnaphthalene	4.99	ug/L	5	99.8	56-128	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.90	ug/L	5	98.0	69-149	4/23/2015	4/28/2015
Pyrene	5.43	ug/L	5	108.6	69-119	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.35	ug/L	5	87.0	68-138	4/23/2015	4/28/2015
Fluoranthene	5.42	ug/L	5	108.4	67-120	4/23/2015	4/28/2015
Fluorene	4.97	ug/L	5	99.4	60-116	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.27	ug/L	5	85.4	68-140	4/23/2015	4/28/2015
Naphthalene	4.08	ug/L	5	81.6	51-122	4/23/2015	4/28/2015
Phenanthrene	5.25	ug/L	5	105.0	71-126	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.65	ug/L	5	93.0	68-148	4/23/2015	4/28/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	5.33	ug/L	5	106.6	0.9	0-50	4/23/2015	4/28/2015
Acenaphthene	4.92	ug/L	5	98.4	1.4	0-50	4/23/2015	4/28/2015
Acenaphthylene	4.79	ug/L	5	95.8	2.8	0-50	4/23/2015	4/28/2015
Anthracene	5.22	ug/L	5	104.4	0.4	0-50	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.40	ug/L	5	88.0	0.7	0-50	4/23/2015	4/28/2015
Benzo[a]anthracene	4.96	ug/L	5	99.2	1.6	0-50	4/23/2015	4/28/2015
Benzo[a]pyrene	4.36	ug/L	5	87.2	0.7	0-50	4/23/2015	4/28/2015
2-Methylnaphthalene	5.18	ug/L	5	103.6	3.7	0-50	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.87	ug/L	5	97.4	0.6	0-50	4/23/2015	4/28/2015
Pyrene	5.29	ug/L	5	105.8	2.6	0-50	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.28	ug/L	5	85.6	1.6	0-50	4/23/2015	4/28/2015
Fluoranthene	5.27	ug/L	5	105.4	2.8	0-50	4/23/2015	4/28/2015
Fluorene	5.08	ug/L	5	101.6	2.2	0-50	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.30	ug/L	5	86.0	0.7	0-50	4/23/2015	4/28/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421046
Project Name: SVL #W5D0369

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.29	ug/L	5	85.8	5.0	0-50	4/23/2015	4/28/2015
Phenanthrene	5.22	ug/L	5	104.4	0.6	0-50	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.67	ug/L	5	93.4	0.4	0-50	4/23/2015	4/28/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Chrysene	ND	ug/L	0.01	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluorene	ND	ug/L	0.01	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Naphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Phenanthrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150421046
Order Date: 4/21/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0369
Comment:

Sample #: 150421046-001 **Customer Sample #:** NSH-095-042015

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 1 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:** 2:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/1/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.7
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes

W5D0369

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.2

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley + Aldrich
Contact: Lauren Cordrera
Address: 400 E Van Buren St Ste 545
Phoenix, AZ 85004
Phone Number: 602-700-2450
FAX Number:
E-mail:

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44th St Ste 210
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#: 15241

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination:

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZNAC	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Radio Chem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-095-042015	4/20/15	1430	RN	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals + Silica Sample was filtered w/ a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									Tracking #
6																									12 988 989 23 1001 2613
7																									
8																									
9																									
10																									

Relinquished by:	Date: 4/20/15	Time: 1500	Received by:	Date: 4/20/15	Time: 1500
Relinquished by:	Date: 4-21-15	Time: 1147	Received by:	Date: 4-21-15	Time: 9:50

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

Wednesday, May 20, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504483
Project Name:
Project Number: 5D0371

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/24/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504483

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504483
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0371
Client PO Number: 15238

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-026-042015	1504483-1		WATER	20-Apr-15	14:00

ALS

1504483

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5D0371

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAme
Address:
Phone Number:
FAX Number:
PO#: 15238

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: Az

	Sample ID	Collection Date	Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross a/b 900.0	RAD 226/228 903.1/904	U 234/235/238	ASTM D3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																		Call Chris Meyer With Questions
(1) 1	NSH-026-042015	4/20/15	1400	JN	2	3			X					X	X	X			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
S Jacobson	4-21-15	1244	Scott Malley	4-24-15	9:30
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Analytical Workorder No: 1504483

Project Manager: JRK Initials: SDM Date: 04-24-2015

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	10							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-24-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1504483

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

23 LBS

1 OF 1

DWT: 24,15,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

10
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4419 0593

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

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RRD R 0215

Client: SVL Analytical
Project: 5D0371
Sample ID: NSH-026-042015
Legal Location:
Collection Date: 4/20/2015 14:00

Date: *20-May-15*
Work Order: 1504483
Lab ID: 1504483-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **5/13/2015**	PrepBy: **DKL**
GROSS ALPHA	2.5 (+/- 1.4)	LT	2.3	pCi/l	NA	5/15/2015 15:09
GROSS BETA	**12.9 (+/- 3.1)**		**3.9**	**pCi/l**	NA	5/15/2015 15:09
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **5/12/2015**	PrepBy: **TDE**
Tracer: U-232	*84.1*		*30-110*	*%REC*	DL = NA	5/17/2015 12:56
U-234	**0.64 (+/- 0.19)**		**0.05**	**pCi/l**	NA	5/17/2015 12:56
U-235	ND (+/- 0.042)	U	0.063	pCi/l	NA	5/17/2015 12:56
U-238	**0.51 (+/- 0.17)**		**0.1**	**pCi/l**	NA	5/17/2015 12:56
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/4/2015**	PrepBy: **PJW**
Ra-226	**1.1 (+/- 0.37)**		**0.11**	**pCi/l**	NA	5/11/2015 12:36
Carr: BARIUM	*93.9*		*40-110*	*%REC*	DL = NA	5/11/2015 12:36
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/27/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.2)	U	0.46	pCi/l	NA	5/4/2015 10:00
Carr: BARIUM	*93.9*		*40-110*	*%REC*	DL = NA	5/4/2015 10:00

Client:	SVL Analytical	**Date:**	*20-May-15*
Project:	5D0371	**Work Order:**	1504483
Sample ID:	NSH-026-042015	**Lab ID:**	1504483-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/20/2015 14:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504483
Project: 5D0371

Date: *5/20/2015 2:37:*

QC BATCH REPORT

Batch ID: **RE150504-2-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	26.3 (+/- 6.7)	0.3	30.71		85.7	67-120					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27.7 (+/- 7)	0.3	30.71		90.1	67-120		26.3	0.1	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RE150504-2** Units: **pCi/l** Analysis Date: **5/11/2015 13:07**
Client ID: Run ID: **RE150504-2A** Prep Date: **5/4/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.19									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504483-1

Client: SVL Analytical
Work Order: 1504483
Project: 5D0371

QC BATCH REPORT

Batch ID: **AS150512-5-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:42**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.23 (+/- 0.75)	0.04	4.416		95.8	82-122					P
U-238	4.89 (+/- 0.86)	0.03	4.585		107	78-126					P
Tracer: U-232	3.54	0.06	4.167		85	30-110					

MB Sample ID: **AS150512-5** Units: **pCi/l** Analysis Date: **5/17/2015 12:56**

Client ID: Run ID: **AS150512-5UR** Prep Date: **5/12/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.041									U
U-235	ND	0.016									U
U-238	ND	0.041									U
Tracer: U-232	3.35	0.05	4.167		80.4	30-110					

The following samples were analyzed in this batch: 1504483-1 1503591-1

Client: SVL Analytical
Work Order: 1504483
Project: 5D0371

QC BATCH REPORT

Batch ID: **AB150513-1-4** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 12:54**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	225 (+/- 37)	3	224.3		100	70-130					P
GROSS BETA	219 (+/- 36)	6	203.8		107	70-130					P,M3

MB Sample ID: **AB150513-1** Units: **pCi/l** Analysis Date: **5/15/2015 15:12**

Client ID: Run ID: **AB150513-1A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.56									U
GROSS BETA	ND	1.02									U

The following samples were analyzed in this batch: 1504483-1

Client: SVL Analytical
Work Order: 1504483
Project: 5D0371

QC BATCH REPORT

Batch ID: **RA150427-1-1** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.1 (+/- 1.9)	0.6	7.818		104	70-130					P
Carr: BARIUM	30980		33300		93.1	40-110					

LCSD Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	9.2 (+/- 2.2)	0.5	7.818		117	70-130		8.1	0.4	2.1	P
Carr: BARIUM	31560		33300		94.8	40-110		30980			

MB Sample ID: **RA150427-1** Units: **pCi/l** Analysis Date: **5/4/2015 10:00**
Client ID: Run ID: **RA150427-1A** Prep Date: **4/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.48									U
Carr: BARIUM	31140		33290		93.5	40-110					

The following samples were analyzed in this batch: 1504483-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-026-042015	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0371-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromoethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-hexanone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Acetone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-026-042015	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0371-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Methyl ethyl ketone (MEK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methyl isobutyl ketone (MIBK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methylene chloride	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-026-042015	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5D0371-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Toluene	0.52	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroflouromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Surrogate Data

Sample Number 150421044-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260B	105.6	70-130
4-Bromofluorobenzene	EPA 8260B	101.2	70-130
Toluene-d8	EPA 8260B	102.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0371-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dibromoethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
2-hexanone	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Acetone	25.3	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Acrylonitrile	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Benzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0371-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromoform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Bromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon disulfide	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chlorobenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloroform	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Chloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dibromomethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Ethylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
m+p-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Methyl ethyl ketone (MEK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methyl isobutyl ketone (MIBK)	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
Methylene chloride	ND	ug/L	0.5	2.5	4/22/2015	SAT	EPA 8260B	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Naphthalene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
o-Xylene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Styrene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421044-002	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0371-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Toluene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroethene	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Trichloroflouromethane	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/22/2015	SAT	EPA 8260B	

Surrogate Data

Sample Number 150421044-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260B	104.8	70-130
4-Bromofluorobenzene	EPA 8260B	103.6	70-130
Toluene-d8	EPA 8260B	103.2	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.80	ug/L	10	98.0	72-125	4/21/2015	4/22/2015
Toluene	9.58	ug/L	10	95.8	76-123	4/21/2015	4/22/2015
Tetrachloroethene	9.19	ug/L	10	91.9	78-119	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	83-117	4/21/2015	4/22/2015
Ethylbenzene	9.95	ug/L	10	99.5	84-115	4/21/2015	4/22/2015
Chlorobenzene	10.0	ug/L	10	100.0	85-115	4/21/2015	4/22/2015
Benzene	9.71	ug/L	10	97.1	75-125	4/21/2015	4/22/2015
1,1-Dichloroethene	9.40	ug/L	10	94.0	68-127	4/21/2015	4/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.99	ug/L	10	99.9	1.9	0-20	4/21/2015	4/22/2015
Toluene	9.82	ug/L	10	98.2	2.5	0-20	4/21/2015	4/22/2015
Tetrachloroethene	9.78	ug/L	10	97.8	6.2	0-20	4/21/2015	4/22/2015
o-Xylene	10.3	ug/L	10	103.0	0.0	0-20	4/21/2015	4/22/2015
Ethylbenzene	10.0	ug/L	10	100.0	0.5	0-20	4/21/2015	4/22/2015
Chlorobenzene	9.86	ug/L	10	98.6	1.4	0-20	4/21/2015	4/22/2015
Benzene	9.93	ug/L	10	99.3	2.2	0-20	4/21/2015	4/22/2015
1,1-Dichloroethene	9.96	ug/L	10	99.6	5.8	0-20	4/21/2015	4/22/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150421045-001	Trichloroethene	ND	9.62	ug/L	10	96.2	56-143	4/21/2015	4/22/2015
150421045-001	Toluene	0.51	9.48	ug/L	10	89.7	66-136	4/21/2015	4/22/2015
150421045-001	Tetrachloroethene	ND	9.54	ug/L	10	95.4	53-149	4/21/2015	4/22/2015
150421045-001	o-Xylene	ND	9.45	ug/L	10	94.5	68-134	4/21/2015	4/22/2015
150421045-001	Ethylbenzene	ND	9.25	ug/L	10	92.5	70-137	4/21/2015	4/22/2015
150421045-001	Chlorobenzene	ND	9.22	ug/L	10	92.2	68-136	4/21/2015	4/22/2015
150421045-001	Benzene	ND	9.27	ug/L	10	92.7	63-139	4/21/2015	4/22/2015
150421045-001	1,1-Dichloroethene	ND	9.49	ug/L	10	94.9	59-144	4/21/2015	4/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,1-dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dibromoethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/21/2015	4/22/2015
2-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
2-hexanone	ND	ug/L	2.5	4/21/2015	4/22/2015
4-Chlorotoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
Acetone	ND	ug/L	2.5	4/21/2015	4/22/2015
Acrylonitrile	ND	ug/L	0.5	4/21/2015	4/22/2015
Benzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromodichloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromoform	ND	ug/L	0.5	4/21/2015	4/22/2015
Bromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon disulfide	ND	ug/L	0.5	4/21/2015	4/22/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/21/2015	4/22/2015
Chlorobenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Chloroform	ND	ug/L	0.5	4/21/2015	4/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421044
Project Name: SVL #W5D0371

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Chloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromochloromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dibromomethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Dichlorodifluoromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Ethylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/21/2015	4/22/2015
Isopropylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
m+p-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	4/21/2015	4/22/2015
Methylene chloride	ND	ug/L	2.5	4/21/2015	4/22/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/21/2015	4/22/2015
Naphthalene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
n-Propylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
o-Xylene	ND	ug/L	0.5	4/21/2015	4/22/2015
p-isopropyltoluene	ND	ug/L	0.5	4/21/2015	4/22/2015
sec-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Styrene	ND	ug/L	0.5	4/21/2015	4/22/2015
tert-Butylbenzene	ND	ug/L	0.5	4/21/2015	4/22/2015
Tetrachloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Toluene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroethene	ND	ug/L	0.5	4/21/2015	4/22/2015
Trichloroflouromethane	ND	ug/L	0.5	4/21/2015	4/22/2015
Vinyl Chloride	ND	ug/L	0.5	4/21/2015	4/22/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150421044
Order Date: 4/21/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0371
Comment:

Sample #: 150421044-001 **Customer Sample #:** NSH-026-042015

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 3 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 8260 SVL LIST	M	EPA 8260B	4/22/2015	***1 Day***

Sample #: 150421044-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 1 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 8260 SVL LIST	M	EPA 8260B	4/22/2015	***1 Day***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.7
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0371

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.4

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley & Aldrich
Contact: Lauren Candreva
Address: 400 E Van Buren St Ste 545
Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44th St Ste 300
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and 0
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	Analyses Required: Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Radio Chem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-026-042015	4/20/15	1400	SN	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica Sample was field filtered w/ a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									Tracking #
6																									12 9X8 989 23 1001 264 0
7																									
8																									
9																									
10																									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	4/20/15	1500		4/20/15	1500
	4-21-15	1149		4-21-15	10:00

*Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421050
Project Name: SVL #W5D0371

Analytical Results Report

Sample Number	150421050-001	**Sampling Date**	4/20/2015	**Date/Time Received**	4/21/2015 3:45 PM
Client Sample ID	NSH-026-042015	**Sampling Time**	2:00 PM	**Extraction Date**	4/23/15
Matrix	Water	**Sample Location**	W5D0371-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	4/28/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150421050-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	97.8	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421050
Project Name: SVL #W5D0371

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	5.28	ug/L	5	105.6	62-139	4/23/2015	4/28/2015
Acenaphthene	4.85	ug/L	5	97.0	70-135	4/23/2015	4/28/2015
Acenaphthylene	4.66	ug/L	5	93.2	67-121	4/23/2015	4/28/2015
Anthracene	5.20	ug/L	5	104.0	63-113	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.37	ug/L	5	87.4	71-141	4/23/2015	4/28/2015
Benzo[a]anthracene	5.04	ug/L	5	100.8	71-142	4/23/2015	4/28/2015
Benzo[a]pyrene	4.33	ug/L	5	86.6	71-143	4/23/2015	4/28/2015
2-Methylnaphthalene	4.99	ug/L	5	99.8	56-128	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.90	ug/L	5	98.0	69-149	4/23/2015	4/28/2015
Pyrene	5.43	ug/L	5	108.6	69-119	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.35	ug/L	5	87.0	68-138	4/23/2015	4/28/2015
Fluoranthene	5.42	ug/L	5	108.4	67-120	4/23/2015	4/28/2015
Fluorene	4.97	ug/L	5	99.4	60-116	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.27	ug/L	5	85.4	68-140	4/23/2015	4/28/2015
Naphthalene	4.08	ug/L	5	81.6	51-122	4/23/2015	4/28/2015
Phenanthrene	5.25	ug/L	5	105.0	71-126	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.65	ug/L	5	93.0	68-148	4/23/2015	4/28/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	5.33	ug/L	5	106.6	0.9	0-50	4/23/2015	4/28/2015
Acenaphthene	4.92	ug/L	5	98.4	1.4	0-50	4/23/2015	4/28/2015
Acenaphthylene	4.79	ug/L	5	95.8	2.8	0-50	4/23/2015	4/28/2015
Anthracene	5.22	ug/L	5	104.4	0.4	0-50	4/23/2015	4/28/2015
Benzo(ghi)perylene	4.40	ug/L	5	88.0	0.7	0-50	4/23/2015	4/28/2015
Benzo[a]anthracene	4.96	ug/L	5	99.2	1.6	0-50	4/23/2015	4/28/2015
Benzo[a]pyrene	4.36	ug/L	5	87.2	0.7	0-50	4/23/2015	4/28/2015
2-Methylnaphthalene	5.18	ug/L	5	103.6	3.7	0-50	4/23/2015	4/28/2015
Benzo[k]fluoranthene	4.87	ug/L	5	97.4	0.6	0-50	4/23/2015	4/28/2015
Pyrene	5.29	ug/L	5	105.8	2.6	0-50	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	4.28	ug/L	5	85.6	1.6	0-50	4/23/2015	4/28/2015
Fluoranthene	5.27	ug/L	5	105.4	2.8	0-50	4/23/2015	4/28/2015
Fluorene	5.08	ug/L	5	101.6	2.2	0-50	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	4.30	ug/L	5	86.0	0.7	0-50	4/23/2015	4/28/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150421050
Project Name: SVL #W5D0371

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	4.29	ug/L	5	85.8	5.0	0-50	4/23/2015	4/28/2015
Phenanthrene	5.22	ug/L	5	104.4	0.6	0-50	4/23/2015	4/28/2015
Benzo[b]fluoranthene	4.67	ug/L	5	93.4	0.4	0-50	4/23/2015	4/28/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Acenaphthylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Chrysene	ND	ug/L	0.01	4/23/2015	4/28/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluoranthene	ND	ug/L	0.01	4/23/2015	4/28/2015
Fluorene	ND	ug/L	0.01	4/23/2015	4/28/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Naphthalene	ND	ug/L	0.01	4/23/2015	4/28/2015
Phenanthrene	ND	ug/L	0.01	4/23/2015	4/28/2015
Pyrene	ND	ug/L	0.01	4/23/2015	4/28/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150421050
Order Date: 4/21/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0371
Comment:

Sample #: 150421050-001 **Customer Sample #:** NSH-026-042015

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/20/2015
Quantity: 1 **Date Received:** 4/21/2015 3:45:00 PM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/1/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.7
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes

L500371

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SVL JOB #

TEMP on Receipt: 2.4

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley & Aldrich
Contact: Lauren Condreva
Address: 400 E Van Buren St Ste 545
Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcondreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44th St Ste 300
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and o
Thanks!

	Sample ID	Collection: Date	Collection: Time	Collected by: (Init.)	Misc.: Matrix Type (From Table 1)	Misc.: No. of Containers	Preservative(s): Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOC's (524.3)	Reactive Chem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-026-042015	4/20/15	1400	GN	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica sample was field filtered w/ a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									
5																									Tracking #
6																									12 9X8 989 23 1001 264 0
7																									
8																									
9																									
10																									

Relinquished by:		Date: 4/20/15	Time: 1500	Received by:		Date: 4/20/15	Time: 1500
Relinquished by:	Jacobson	Date: 4-21-15	Time: 1149	Received by:		Date: 4-21-15	Time: 10:00

Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-026-042015	W5D0371-01	Ground Water	20-Apr-15 14:00	JN	21-Apr-2015	
TRIP BLANK	W5D0371-02	Ground Water	20-Apr-15 00:00	JN	21-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

Case Narrative

05/04/15 HJG RPD exceeded method acceptance limit of ±0.1 for SM 4500 H+B pH.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Client Sample ID: **NSH-026-042015**
SVL Sample ID: **W5D0371-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 20-Apr-15 14:00
Received: 21-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W517195	AS	05/06/15 11:25	U
EPA 200.7	**Calcium**	37.7	mg/L	0.040	0.029		W517195	AS	05/06/15 11:25	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W517195	AS	05/06/15 11:25	U
EPA 200.7	**Magnesium**	9.10	mg/L	0.20	0.11		W517195	AS	05/06/15 11:25	
EPA 200.7	**Potassium**	1.87	mg/L	0.50	0.17		W517195	AS	05/06/15 11:25	
EPA 200.7	**Silica (SiO2)**	30.5	mg/L	0.17	0.12		W517195	AS	05/06/15 11:25	
EPA 200.7	**Sodium**	34.9	mg/L	0.50	0.05		W517195	AS	05/06/15 11:25	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W517216	KWH	04/30/15 10:58	U
EPA 200.8	**Arsenic**	0.00168	mg/L	0.00300	0.00027		W517216	KWH	04/30/15 08:36	J
EPA 200.8	**Barium**	0.0687	mg/L	0.00100	0.000099		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Beryllium**	0.00031	mg/L	0.00020	0.000048		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Boron**	0.0463	mg/L	0.0050	0.0012		W517216	KWH	04/30/15 07:05	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W517216	KWH	04/30/15 07:05	U
EPA 200.8	**Chromium**	0.0052	mg/L	0.0015	0.0004		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W517216	KWH	04/30/15 07:05	J
EPA 200.8	**Copper**	0.0211	mg/L	0.00100	0.00015		W517216	KWH	04/30/15 08:36	
EPA 200.8	**Lead**	0.00021	mg/L	0.00300	0.000031		W517216	KWH	04/30/15 07:05	J
EPA 200.8	**Manganese**	0.0226	mg/L	0.00100	0.000025		W517216	KWH	04/30/15 08:36	
EPA 200.8	**Molybdenum**	0.0784	mg/L	0.00100	0.00009		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Nickel**	0.0013	mg/L	0.0010	0.0004		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Selenium**	0.0030	mg/L	0.0030	0.0006		W517216	KWH	04/30/15 07:05	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W517216	KWH	04/30/15 07:05	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W517216	KWH	04/30/15 08:36	U
EPA 200.8	**Uranium**	0.00137	mg/L	0.00100	0.000014		W517216	KWH	04/30/15 07:05	
EPA 200.8	**Vanadium**	0.0023	mg/L	0.0030	0.0009		W517216	KWH	04/30/15 07:05	J
EPA 200.8	**Zinc**	0.288	mg/L	0.0050	0.0010		W517216	KWH	04/30/15 08:36	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W518029	STA	04/28/15 13:19	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	149	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:39	
SM 2320B	**Bicarbonate**	149	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:39	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:39	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W517112	DKS	04/22/15 09:39	U
SM 2510 B	**Specific conductance**	397	µmhos/cm	5.00			W517143	RS	04/22/15 07:40	
SM 2540 C	**Total Diss. Solids**	250	mg/L	10			W517146	RS	04/22/15 09:35	
SM 4500 H B	**pH @23.0°C**	7.95	pH Units				W517112	DKS	04/22/15 09:39	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W518090	VRH	04/28/15 13:44	U
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W517118	SM	04/21/15 15:21	H6,U
SM 4500-S-F	**Sulfide**	0.44	mg/L	1.00	0.27		W517179	SM	04/22/15 15:24	J
SM 5310B	Total Organic Carbon	< 0.24	mg/L	1.00	0.24		W518028	SM	04/29/15 21:26	U

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Client Sample ID: **NSH-026-042015**
SVL Sample ID: **W5D0371-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 20-Apr-15 14:00
Received: 21-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	26.3	mg/L	2.00	0.56	10	W517100	MCE	04/21/15 16:40	D2
EPA 300.0	**Fluoride**	3.75	mg/L	0.100	0.022		W517100	MCE	04/21/15 11:27	
EPA 300.0	**Nitrate as N**	1.23	mg/L	0.050	0.008		W517100	MCE	04/21/15 11:27	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W517100	MCE	04/21/15 11:27	U
EPA 300.0	**Sulfate as SO4**	18.9	mg/L	0.30	0.05		W517100	MCE	04/21/15 11:27	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.21 meq/L Anion Sum: 4.40 meq/L C/A Balance: -2.17 % Calculated TDS: 258 TDS/cTDS: 0.97 TDS/eC: 0.63

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W517195	06-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W517195	06-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W517195	06-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W517195	06-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W517195	06-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W517195	06-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W517195	06-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517216	30-Apr-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517216	30-Apr-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517216	30-Apr-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517216	30-Apr-15	U
EPA 200.8	Boron	mg/L	0.0014	0.0012	0.0050	W517216	30-Apr-15	J
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517216	30-Apr-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517216	30-Apr-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517216	30-Apr-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517216	30-Apr-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517216	30-Apr-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517216	30-Apr-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W517216	30-Apr-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517216	30-Apr-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517216	30-Apr-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517216	30-Apr-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517216	30-Apr-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517216	30-Apr-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517216	30-Apr-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W517216	30-Apr-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W518029	28-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.25		1.0	W517112	22-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.25		1.0	W517112	22-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W517112	22-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W517112	22-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W517146	22-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W518090	28-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W517118	21-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W517179	22-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W518028	29-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W517100	21-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W517100	21-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W517100	21-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W517100	21-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W517100	21-Apr-15	U

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.04	1.00	104	85 - 115	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	19.8	20.0	99.2	85 - 115	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.99	10.0	99.9	85 - 115	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	20.2	20.0	101	85 - 115	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	20.8	20.0	104	85 - 115	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	98.4	85 - 115	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	19.1	19.0	101	85 - 115	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0245	0.0250	98.0	85 - 115	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0279	0.0250	112	85 - 115	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0269	0.0250	107	85 - 115	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0273	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0270	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.0265	0.0250	106	85 - 115	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0272	0.0250	109	85 - 115	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0285	0.0250	114	85 - 115	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0260	0.0250	104	85 - 115	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0259	0.0250	103	85 - 115	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.0277	0.0250	111	85 - 115	W517216	30-Apr-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00507	0.00500	101	85 - 115	W518029	28-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	103	85 - 115	W517112	22-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	103	85 - 115	W517112	22-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	296	306	96.8	90 - 110	W517143	22-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.161	0.150	107	90 - 110	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.766	0.786	97.5	90 - 110	W517118	21-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.52	2.50	101	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	34.4	34.3	100	90 - 110	W518028	29-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.93	3.00	97.8	90 - 110	W517100	21-Apr-15	
EPA 300.0	Fluoride	mg/L	1.95	2.00	97.5	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	1.97	2.01	97.9	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.58	2.51	103	90 - 110	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.84	10.0	98.4	90 - 110	W517100	21-Apr-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	149	150	0.8	20	W517112	22-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	149	150	0.8	20	W517112	22-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W517112	22-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W517112	22-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	386	388	0.6	20	W517143	22-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	251	250	0.4	10	W517146	22-Apr-15	
SM 4500 H B	pH	pH Units	7.81	7.93	1.5	20	W517112	22-Apr-15	R1

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.01	<0.036	1.00	101	70 - 130	W517195	06-May-15	
EPA 200.7	Aluminum	mg/L	1.02	<0.036	1.00	102	70 - 130	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	58.3	39.4	20.0	94.3	70 - 130	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	259	237	20.0	110	70 - 130	W517195	06-May-15	M3
EPA 200.7	Iron	mg/L	10.0	<0.026	10.0	100	70 - 130	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.75	<0.026	10.0	97.5	70 - 130	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	29.2	9.40	20.0	99.2	70 - 130	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	86.0	65.2	20.0	104	70 - 130	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	23.0	1.97	20.0	105	70 - 130	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	25.8	4.98	20.0	104	70 - 130	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	41.9	31.5	10.7	97.2	70 - 130	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.0	46.8	10.7	113	70 - 130	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	54.5	36.0	19.0	97.4	70 - 130	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	73.7	53.6	19.0	106	70 - 130	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0244	<0.00019	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0287	0.00154	0.0250	109	70 - 130	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0961	0.0723	0.0250	95.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.00032	0.0250	104	70 - 130	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0695	0.0478	0.0250	86.7	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	<0.000072	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0304	0.0046	0.0250	103	70 - 130	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0256	0.00007	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0451	0.0210	0.0250	96.6	70 - 130	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0234	0.00007	0.0250	93.2	70 - 130	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0461	0.0218	0.0250	97.4	70 - 130	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.104	0.0782	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0011	0.0250	100	70 - 130	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0346	0.0028	0.0250	127	70 - 130	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	<0.000021	0.0250	102	70 - 130	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0235	<0.000026	0.0250	94.1	70 - 130	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0248	0.00149	0.0250	93.3	70 - 130	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0290	0.0027	0.0250	105	70 - 130	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.297	0.280	0.0250	R > 4S	70 - 130	W517216	30-Apr-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00105	<0.00004	0.00100	105	70 - 130	W518029	28-Apr-15	
EPA 245.1	Mercury	mg/L	0.00107	<0.00004	0.00100	107	70 - 130	W518029	28-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	<0.0025	0.100	111	75 - 125	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.494	<0.0058	0.500	98.9	75 - 125	W517118	21-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-S-F	Sulfide	mg/L	2.76	<0.39	2.50	96.0	80 - 120	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.6	0.37	50.0	98.4	80 - 120	W518028	29-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	30.1	26.2	3.00	R > 4S	90 - 110	W517100	21-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.83	3.75	2.00	104	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.38	1.22	2.00	108	90 - 110	W517100	21-Apr-15	
EPA 300.0	Nitrite as N	mg/L	1.92	<0.014	2.00	95.9	90 - 110	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	29.5	18.9	10.0	106	90 - 110	W517100	21-Apr-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.01	1.01	1.00	101	0.3	20	W517195	06-May-15	
EPA 200.7	Calcium	mg/L	56.9	58.3	20.0	87.6	2.3	20	W517195	06-May-15	
EPA 200.7	Iron	mg/L	9.81	10.0	10.0	98.1	1.9	20	W517195	06-May-15	
EPA 200.7	Magnesium	mg/L	28.5	29.2	20.0	95.5	2.5	20	W517195	06-May-15	
EPA 200.7	Potassium	mg/L	22.5	23.0	20.0	103	1.9	20	W517195	06-May-15	
EPA 200.7	Silica (SiO2)	mg/L	40.9	41.9	10.7	88.2	2.3	20	W517195	06-May-15	
EPA 200.7	Sodium	mg/L	53.2	54.5	19.0	90.4	2.5	20	W517195	06-May-15	
EPA 200.8	Antimony	mg/L	0.0250	0.0244	0.0250	100	2.7	20	W517216	30-Apr-15	
EPA 200.8	Arsenic	mg/L	0.0301	0.0287	0.0250	114	4.9	20	W517216	30-Apr-15	
EPA 200.8	Barium	mg/L	0.0936	0.0961	0.0250	85.3	2.7	20	W517216	30-Apr-15	
EPA 200.8	Beryllium	mg/L	0.0263	0.0263	0.0250	104	0.2	20	W517216	30-Apr-15	
EPA 200.8	Boron	mg/L	0.0721	0.0695	0.0250	97.1	3.7	20	W517216	30-Apr-15	
EPA 200.8	Cadmium	mg/L	0.0263	0.0263	0.0250	105	0.0	20	W517216	30-Apr-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0304	0.0250	101	2.0	20	W517216	30-Apr-15	
EPA 200.8	Cobalt	mg/L	0.0252	0.0256	0.0250	100	1.9	20	W517216	30-Apr-15	
EPA 200.8	Copper	mg/L	0.0443	0.0451	0.0250	93.3	1.9	20	W517216	30-Apr-15	
EPA 200.8	Lead	mg/L	0.0225	0.0234	0.0250	89.8	3.7	20	W517216	30-Apr-15	
EPA 200.8	Manganese	mg/L	0.0450	0.0461	0.0250	92.9	2.5	20	W517216	30-Apr-15	
EPA 200.8	Molybdenum	mg/L	0.103	0.104	0.0250	97.7	0.9	20	W517216	30-Apr-15	
EPA 200.8	Nickel	mg/L	0.0259	0.0261	0.0250	99.2	0.7	20	W517216	30-Apr-15	
EPA 200.8	Selenium	mg/L	0.0352	0.0346	0.0250	130	1.8	20	W517216	30-Apr-15	
EPA 200.8	Silver	mg/L	0.0254	0.0254	0.0250	102	0.1	20	W517216	30-Apr-15	
EPA 200.8	Thallium	mg/L	0.0241	0.0235	0.0250	96.5	2.5	20	W517216	30-Apr-15	
EPA 200.8	Uranium	mg/L	0.0236	0.0248	0.0250	88.4	5.0	20	W517216	30-Apr-15	
EPA 200.8	Vanadium	mg/L	0.0283	0.0290	0.0250	102	2.5	20	W517216	30-Apr-15	
EPA 200.8	Zinc	mg/L	0.302	0.297	0.0250	89.8	1.7	20	W517216	30-Apr-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00107	0.00105	0.00100	107	1.9	20	W518029	28-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	0.111	0.100	111	0.0	20	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.498	0.494	0.500	99.6	0.7	20	W517118	21-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.64	2.76	2.50	91.2	4.4	20	W517179	22-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	48.6	49.6	50.0	96.5	2.0	20	W518028	29-Apr-15	

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0371**
Reported: 22-May-15 09:31

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	29.5	30.1	3.00	R > 4S	2.1	20	W517100	21-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.88	5.83	2.00	106	0.8	20	W517100	21-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.43	3.38	2.00	111	1.5	20	W517100	21-Apr-15	M1
EPA 300.0	Nitrite as N	mg/L	1.97	1.92	2.00	98.5	2.6	20	W517100	21-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	29.9	29.5	10.0	110	1.3	20	W517100	21-Apr-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
R1	RPD exceeded the method acceptance limit. See case narrative.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

Friday, May 29, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504528
Project Name:
Project Number: 5D0434

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/28/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504528

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504528
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5D0434
Client PO Number: 15252

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-010-042115	1504528-1		WATER	21-Apr-15	20:30

ALS

1504528

Page 1 of 1

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5D0434

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15252

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross a/b 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972							Rush Instructions (Days)	Comments
1	NSH-ø1ø-042115 (1)	4/21/15	2030	CG	2	3			X					X	X	X								Please call Chris Meyer with Questions
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
L Jacobson	4-23-15	1237	[illegible signature]	4/28/15	1015
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1504528

Project Manager: JRK Initials: ECP Date: 4/28/15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
* 15. Do any water samples contain sediment? Amount of sediment: X dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

15) all bottles.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-28-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1504528

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

12 LBS

1 OF 1

DWT: 14,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4597 5841

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31 63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.
RRD R 0215

Client: SVL Analytical
Project: 5D0434
Sample ID: NSH-010-042115
Legal Location:
Collection Date: 4/21/2015 20:30

Date: *29-May-15*
Work Order: 1504528
Lab ID: 1504528-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **5/13/2015**	PrepBy: **DKL**
GROSS ALPHA	**11.3 (+/- 2.2)**		**1.2**	**pCi/l**	NA	5/16/2015 13:03
GROSS BETA	**12 (+/- 2.3)**		**1.7**	**pCi/l**	NA	5/16/2015 13:03
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **5/22/2015**	PrepBy: **TDE**
Tracer: U-232	*79.6*		*30-110*	*%REC*	DL = NA	5/25/2015 14:44
U-234	**7.3 (+/- 1.3)**		**0.1**	**pCi/l**	NA	5/25/2015 14:44
U-235	**0.26 (+/- 0.12)**		**0.09**	**pCi/l**	NA	5/25/2015 14:44
U-238	**6.6 (+/- 1.2)**		**0.1**	**pCi/l**	NA	5/25/2015 14:44
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/6/2015**	PrepBy: **PJW**
Ra-226	ND (+/- 0.098)	U	0.129	pCi/l	NA	5/21/2015 14:08
Carr: BARIUM	*90.2*		*40-110*	*%REC*	DL = NA	5/21/2015 14:08
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **4/30/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.23)	U	0.48	pCi/l	NA	5/6/2015 08:46
Carr: BARIUM	*90.2*		*40-110*	*%REC*	DL = NA	5/6/2015 08:46

Client:	SVL Analytical	**Date:**	*29-May-15*
Project:	5D0434	**Work Order:**	1504528
Sample ID:	NSH-010-042115	**Lab ID:**	1504528-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/21/2015 20:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504528
Project: 5D0434

Date: *5/29/2015 8:04:*

QC BATCH REPORT

Batch ID: **RE150506-2-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150506-2** Units: **pCi/l** Analysis Date: **5/21/2015 14:08**

Client ID: Run ID: **RE150506-2A** Prep Date: **5/6/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27.7 (+/- 7)	0.2	30.71		90.1	67-120					P
Carr: BARIUM	30300		33560		90.3	40-110					

MB Sample ID: **RE150506-2** Units: **pCi/l** Analysis Date: **5/21/2015 14:08**

Client ID: Run ID: **RE150506-2A** Prep Date: **5/6/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.151									U
Carr: BARIUM	30610		33560		91.2	40-110					

The following samples were analyzed in this batch: 1504528-1 1503591-2

Client: SVL Analytical
Work Order: 1504528
Project: 5D0434

QC BATCH REPORT

Batch ID: **AS150521-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150521-1** Units: **pCi/l** Analysis Date: **5/25/2015 14:44**

Client ID: Run ID: **AS150521-1U** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.69 (+/- 0.83)	0.06	4.416		106	82-122					P
U-238	4.72 (+/- 0.84)	0.03	4.585		103	78-126					P
Tracer: U-232	3.38	0.06	4.166		81.2	30-110					

MB Sample ID: **AS150521-1** Units: **pCi/l** Analysis Date: **5/25/2015 14:44**

Client ID: Run ID: **AS150521-1U** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	0.031 (+/- 0.025)	0.029									B3
U-235	ND	0.034									U
U-238	ND	0.024									U
Tracer: U-232	3.97	0.06	4.166		95.2	30-110					

The following samples were analyzed in this batch: 1504528-1

Client: SVL Analytical
Work Order: 1504528
Project: 5D0434

QC BATCH REPORT

Batch ID: **AB150513-2-3** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150513-2** Units: **pCi/l** Analysis Date: **5/16/2015 09:15**

Client ID: Run ID: **AB150513-2A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	232 (+/- 38)	3	224.3		103	70-130					P,M3
GROSS BETA	210 (+/- 34)	6	203.8		103	70-130					P,M3

MB Sample ID: **AB150513-2** Units: **pCi/l** Analysis Date: **5/16/2015 13:03**

Client ID: Run ID: **AB150513-2A** Prep Date: **5/13/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.63									U
GROSS BETA	ND	1.07									U

The following samples were analyzed in this batch: 1504528-1 1504562-10

Client: SVL Analytical
Work Order: 1504528
Project: 5D0434

QC BATCH REPORT

Batch ID: **RA150430-1-1** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150430-1** Units: **pCi/l** Analysis Date: **5/6/2015 08:35**

Client ID: Run ID: **RA150430-1A** Prep Date: **4/30/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.9 (+/- 2.3)	1.1	7.813		114	70-130					P,M3
Carr: BARIUM	30300		33560		90.3	40-110					

MB Sample ID: **RA150430-1** Units: **pCi/l** Analysis Date: **5/6/2015 08:46**

Client ID: Run ID: **RA150430-1A** Prep Date: **4/30/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.49									U
Carr: BARIUM	30610		33560		91.2	40-110					

The following samples were analyzed in this batch: 1504528-1 1503591-2

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	NSH-010-042115	**Sampling Time**	8:30 PM		
Matrix	Water	**Sample Location**	W5D0434-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	4/27/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	NSH-010-042115	**Sampling Time**	8:30 PM		
Matrix	Water	**Sample Location**	W5D0434-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	NSH-010-042115	**Sampling Time**	8:30 PM		
Matrix	Water	**Sample Location**	W5D0434-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Toluene	44.9	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150424020-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.2	70-130
Bromofluorobenzene	EPA 524.3	99.8	70-130
Toluene-d8	EPA 524.3	97.6	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001A	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	NSH-010-042115 DUPLICATE	**Sampling Time**	8:30 PM		
Matrix	Water	**Sample Location**	W5D0434-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	5/4/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001A	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	NSH-010-042115 DUPLICATE	**Sampling Time**	8:30 PM		
Matrix	Water	**Sample Location**	W5D0434-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001A	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015	11:25 AM
Client Sample ID	NSH-010-042115 DUPLICATE	**Sampling Time**	8:30 PM			
Matrix	Water	**Sample Location**	W5D0434-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Toluene	41.8	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150424020-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.8	70-130
Bromofluorobenzene	EPA 524.3	95.4	70-130
Toluene-d8	EPA 524.3	95.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-002	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0434-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Acetone	22.2	ug/L	0.5	2.5	4/27/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-002	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0434-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-002	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015 11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0434-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	4/27/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150424020-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.0	70-130
Bromofluorobenzene	EPA 524.3	93.4	70-130
Toluene-d8	EPA 524.3	94.8	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.9	ug/L	10	109.0	70-130	4/27/2015	4/27/2015
Toluene	10.6	ug/L	10	106.0	70-130	4/27/2015	4/27/2015
Tetrachloroethene	10.6	ug/L	10	106.0	70-130	4/27/2015	4/27/2015
o-Xylene	9.67	ug/L	10	96.7	70-130	4/27/2015	4/27/2015
Ethylbenzene	9.78	ug/L	10	97.8	70-130	4/27/2015	4/27/2015
Chlorobenzene	9.91	ug/L	10	99.1	70-130	4/27/2015	4/27/2015
Benzene	10.5	ug/L	10	105.0	70-130	4/27/2015	4/27/2015
1,1-Dichloroethene	10.6	ug/L	10	106.0	70-130	4/27/2015	4/27/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	11.9	ug/L	10	119.0	8.8	0-25	4/27/2015	4/27/2015
Toluene	10.3	ug/L	10	103.0	2.9	0-25	4/27/2015	4/27/2015
Tetrachloroethene	11.4	ug/L	10	114.0	7.3	0-25	4/27/2015	4/27/2015
o-Xylene	10.3	ug/L	10	103.0	6.3	0-25	4/27/2015	4/27/2015
Ethylbenzene	10.2	ug/L	10	102.0	4.2	0-25	4/27/2015	4/27/2015
Chlorobenzene	9.93	ug/L	10	99.3	0.2	0-25	4/27/2015	4/27/2015
Benzene	10.3	ug/L	10	103.0	1.9	0-25	4/27/2015	4/27/2015
1,1-Dichloroethene	10.9	ug/L	10	109.0	2.8	0-25	4/27/2015	4/27/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150423041-001	Trichloroethene	ND	10.3	ug/L	10	103.0	70-130	4/27/2015	4/27/2015
150423041-001	Toluene	ND	10.9	ug/L	10	109.0	70-130	4/27/2015	4/27/2015
150423041-001	Tetrachloroethene	ND	9.60	ug/L	10	96.0	70-130	4/27/2015	4/27/2015
150423041-001	o-Xylene	ND	9.57	ug/L	10	95.7	70-130	4/27/2015	4/27/2015
150423041-001	Ethylbenzene	ND	9.80	ug/L	10	98.0	70-130	4/27/2015	4/27/2015
150423041-001	Chlorobenzene	ND	9.82	ug/L	10	98.2	70-130	4/27/2015	4/27/2015
150423041-001	Benzene	ND	10.5	ug/L	10	105.0	70-130	4/27/2015	4/27/2015
150423041-001	1,1-Dichloroethene	ND	10.9	ug/L	10	109.0	70-130	4/27/2015	4/27/2015

Method Blank

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Quality Control Data

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1,1-Trichloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1-Dichloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1-Dichloroethene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,1-dichloropropene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2-Dibromoethane (EDB)	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2-Dichloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,2-Dichloropropane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
1,3-Dichloropropane	ND	ug/L	0.5	4/27/2015	4/27/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
2,2-Dichloropropane	ND	ug/L	0.5	4/27/2015	4/27/2015
2-Chlorotoluene	ND	ug/L	0.5	4/27/2015	4/27/2015
4-Chlorotoluene	ND	ug/L	0.5	4/27/2015	4/27/2015
Acetone	ND	ug/L	2.5	4/27/2015	4/27/2015
Benzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Bromobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Bromochloromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Bromodichloromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Bromoform	ND	ug/L	0.5	4/27/2015	4/27/2015
Bromomethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Carbon Tetrachloride	ND	ug/L	0.5	4/27/2015	4/27/2015
Chlorobenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Chloroethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Chloroform	ND	ug/L	0.5	4/27/2015	4/27/2015
Chloromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	4/27/2015	4/27/2015
cis-1,3-Dichloropropene	ND	ug/L	0.5	4/27/2015	4/27/2015
Dibromochloromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Dibromomethane	ND	ug/L	0.5	4/27/2015	4/27/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Dichlorodifluoromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Ethylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Hexachlorobutadiene	ND	ug/L	0.5	4/27/2015	4/27/2015
Isopropylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
m+p-Xylene	ND	ug/L	0.5	4/27/2015	4/27/2015
Methylene chloride	ND	ug/L	0.5	4/27/2015	4/27/2015
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	4/27/2015	4/27/2015
Naphthalene	ND	ug/L	0.5	4/27/2015	4/27/2015
n-Butylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
n-Propylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
o-Xylene	ND	ug/L	0.5	4/27/2015	4/27/2015
p-isopropyltoluene	ND	ug/L	0.5	4/27/2015	4/27/2015
sec-Butylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Styrene	ND	ug/L	0.5	4/27/2015	4/27/2015
tert-Butylbenzene	ND	ug/L	0.5	4/27/2015	4/27/2015
Tetrachloroethene	ND	ug/L	0.5	4/27/2015	4/27/2015
Toluene	ND	ug/L	0.5	4/27/2015	4/27/2015
Total Xylene	ND	ug/L	0.5	4/27/2015	4/27/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	4/27/2015	4/27/2015
trans-1,3-Dichloropropene	ND	ug/L	0.5	4/27/2015	4/27/2015
Trichloroethene	ND	ug/L	0.5	4/27/2015	4/27/2015
Trichlorofluoromethane	ND	ug/L	0.5	4/27/2015	4/27/2015
Vinyl Chloride	ND	ug/L	0.5	4/27/2015	4/27/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Instrument :   Saturn 2100
Sample Name: 02 BLANK
Misc Info  :   Varian 2100 GC/MS
Vial Number: 0
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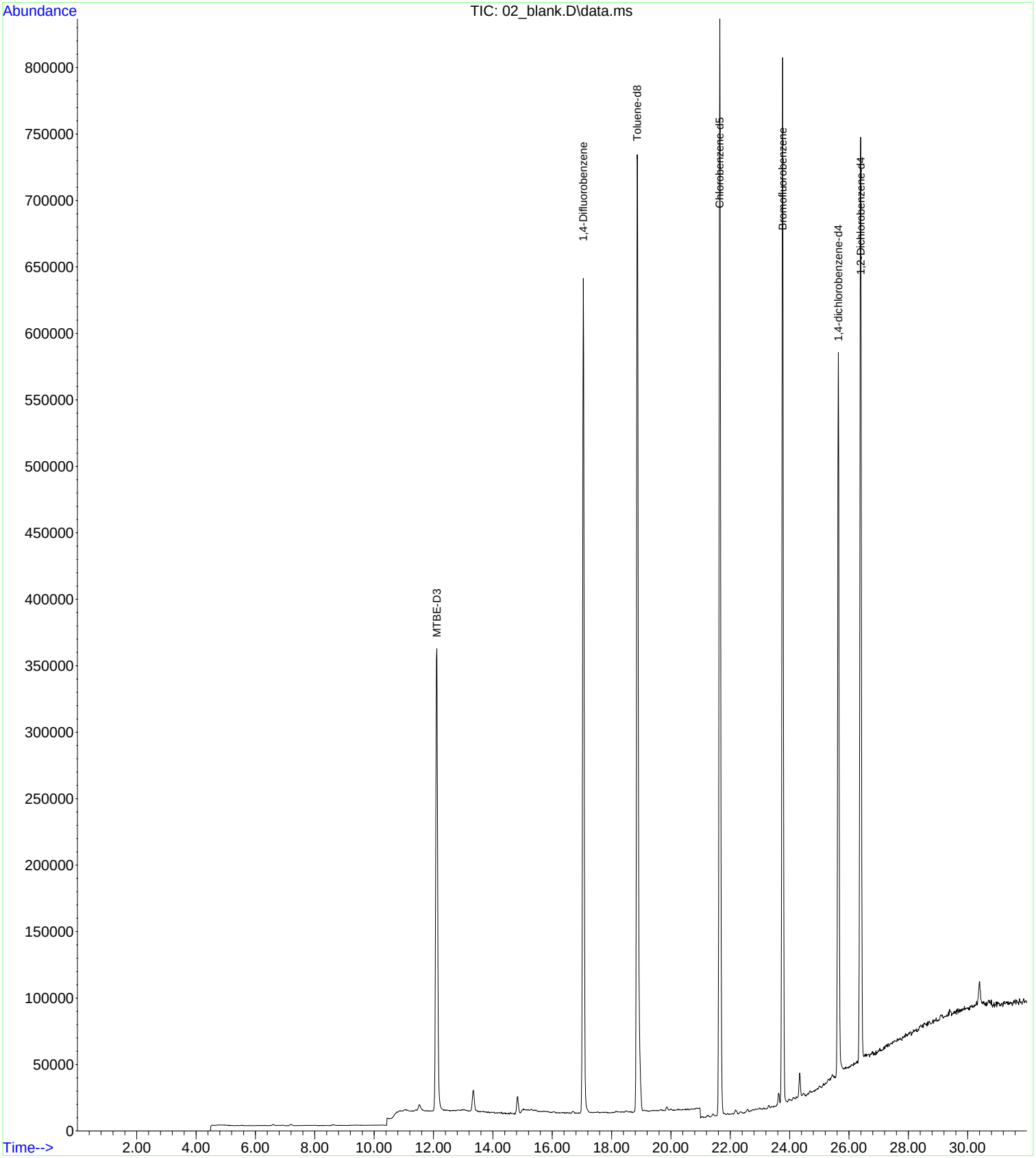

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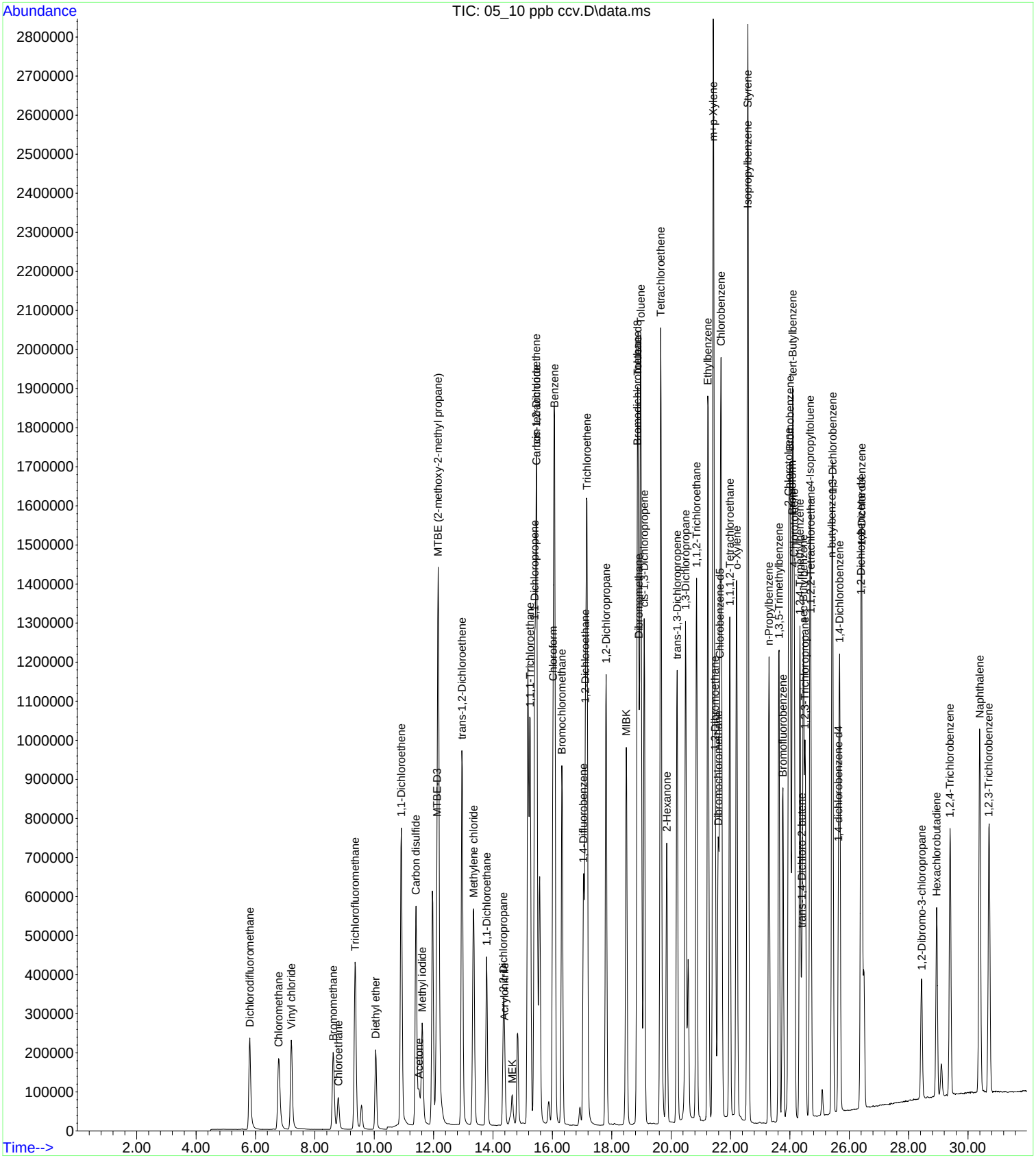
Sample Name: 05 10 PPB CCV
Misc Info : Varian 2100 GC/MS
Vial Number: 0



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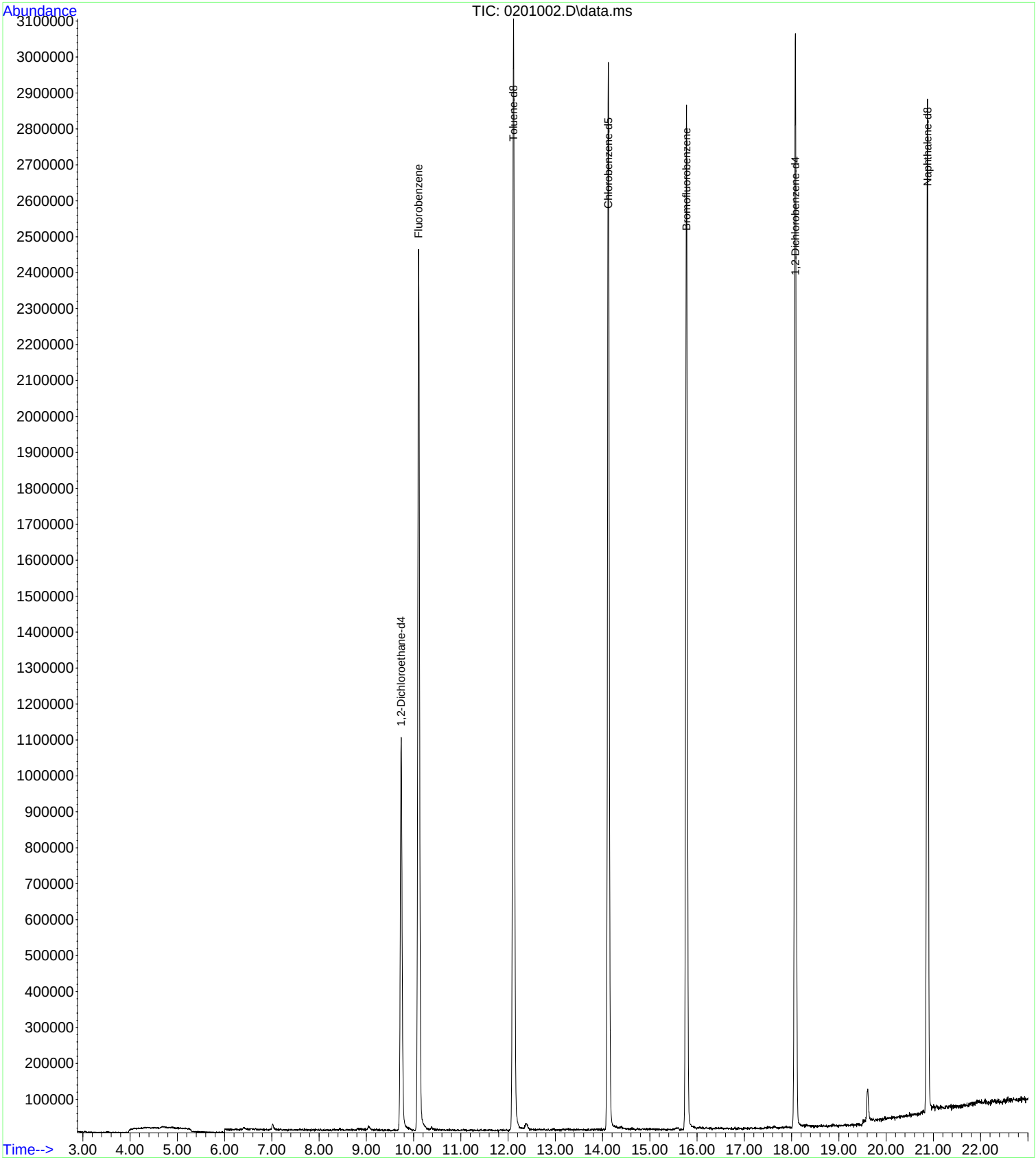
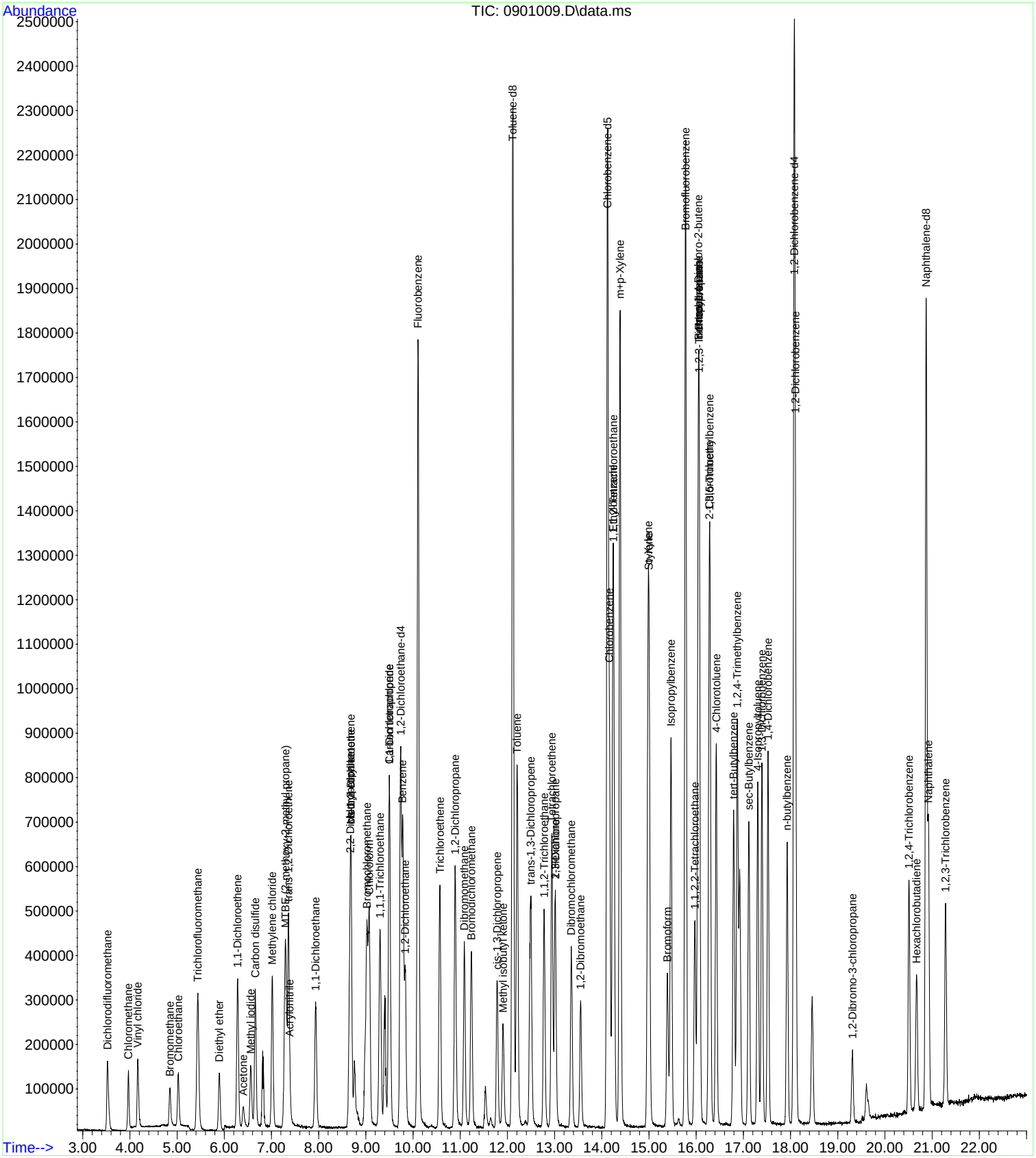
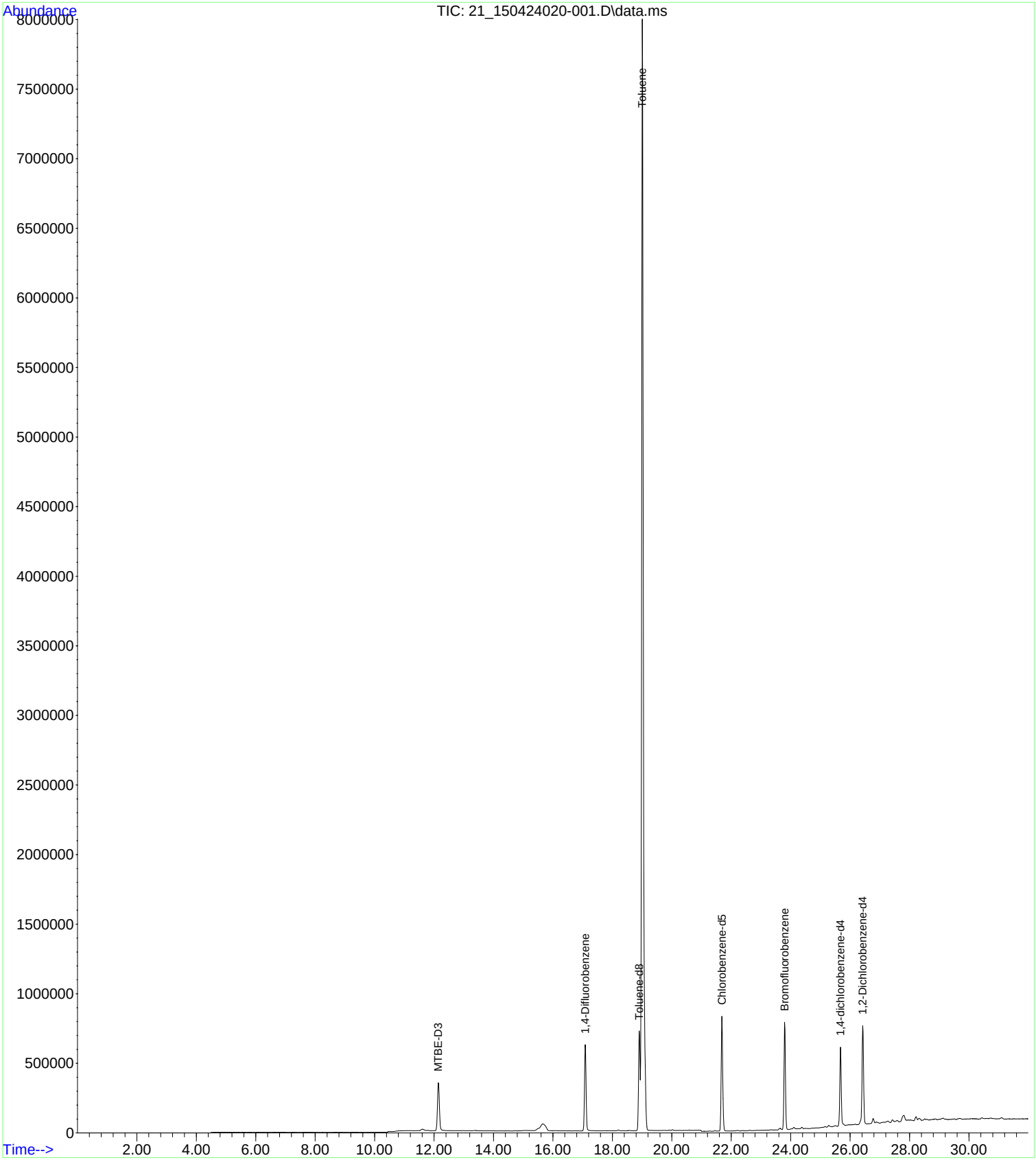
Operator : SAT
Acquired : 4 May 2015 9:00 am using AcqMethod 8260C.M
Instrument : 5975 VOC
Sample Name: BLANK
Misc Info : Agilent 5975 GC/MS
Vial Number: 2



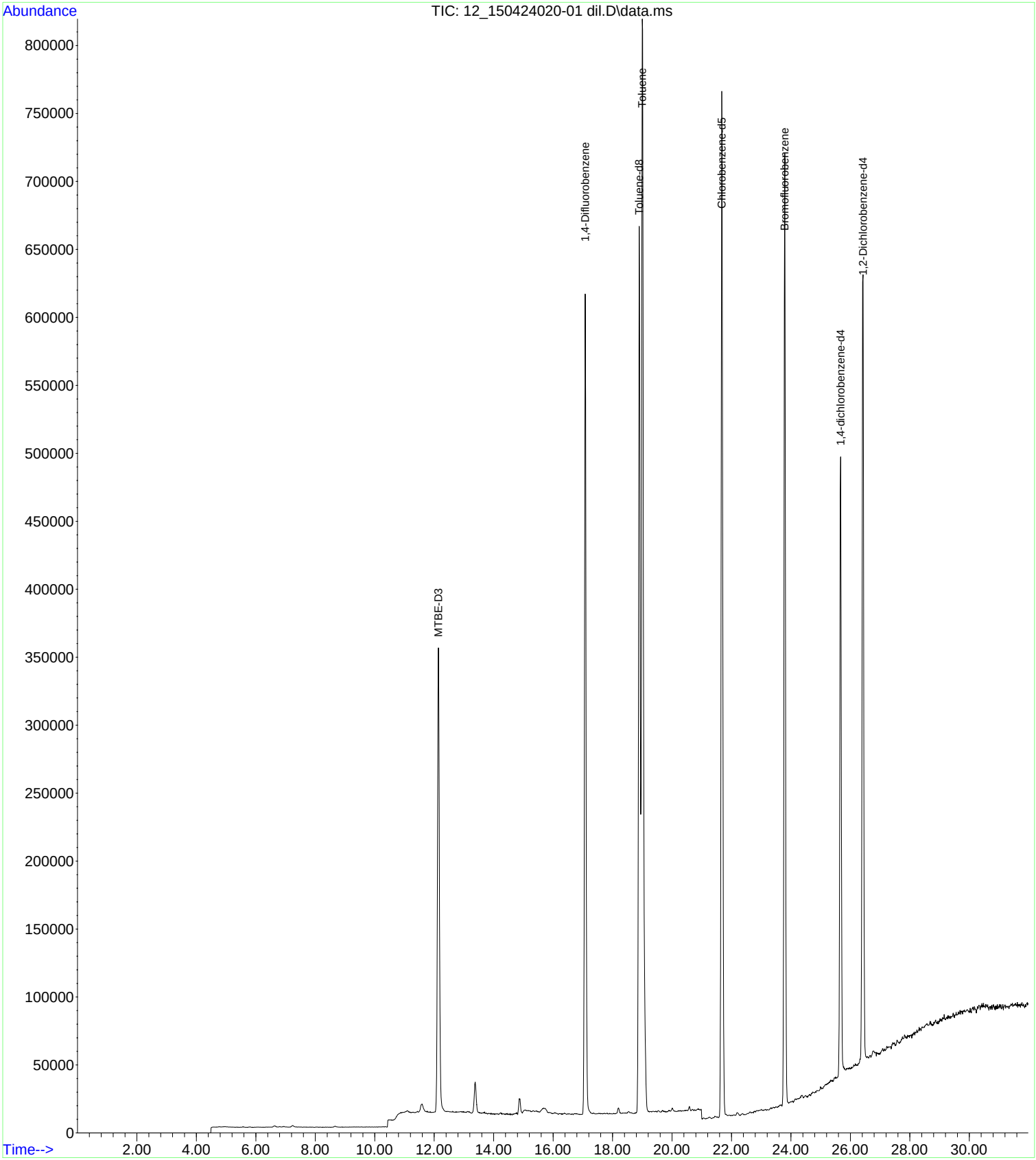
File :T:\Data2\Voc\HP5975\2015 DATA\MAY\04\0901009.D
Operator : SAT
Acquired : 4 May 2015 12:37 pm using AcqMethod 8260C.M
Instrument : 5975 VOC
Sample Name: 10 PPB CCV
Misc Info : Agilent 5975 GC/MS
Vial Number: 9



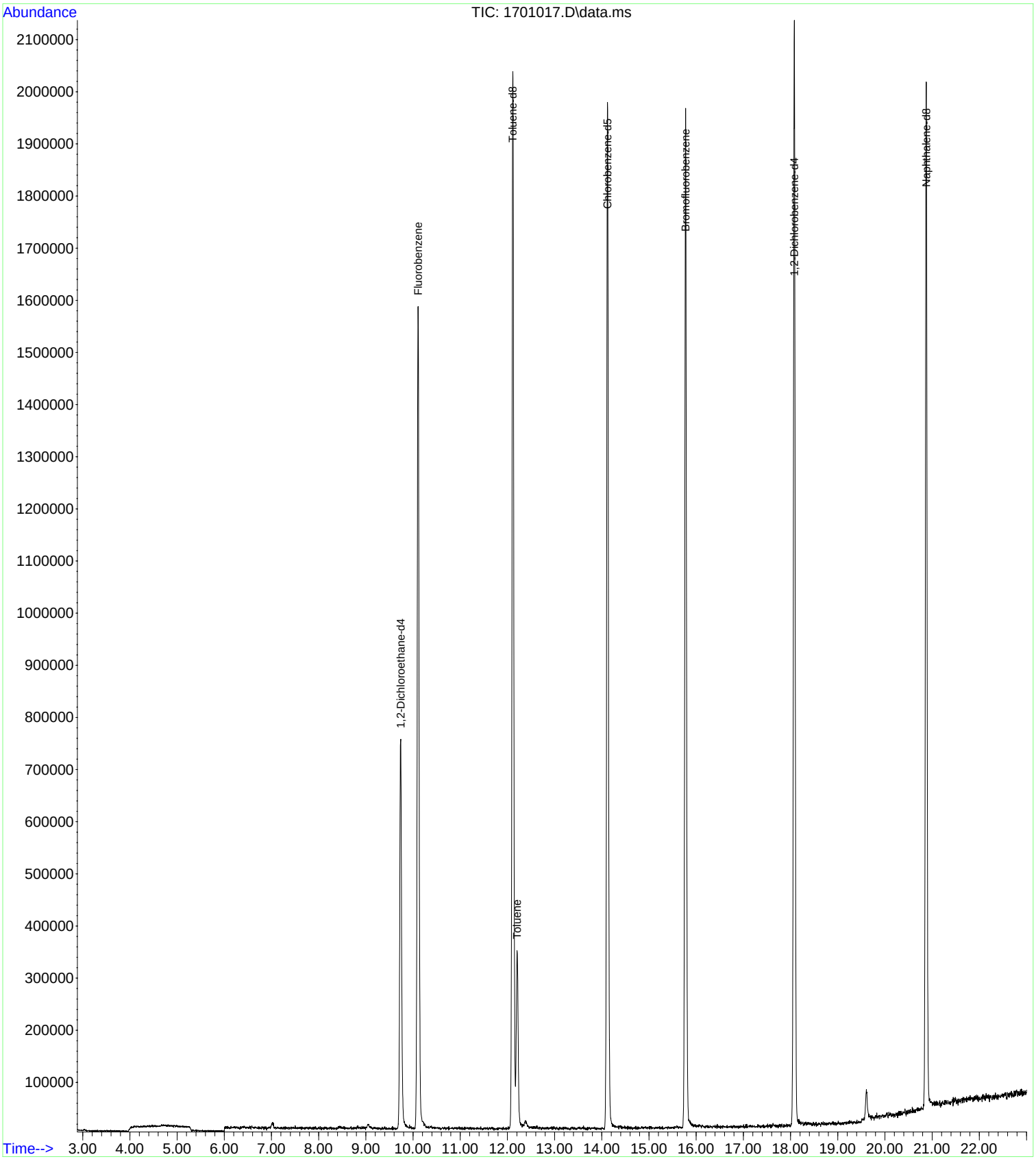
```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\APR\27\21_150424020-001.D
Operator    : SAT
Acquired    : 27 Apr 15  23:28 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 21 150424020-001
Misc Info  :
Vial Number: 0
```



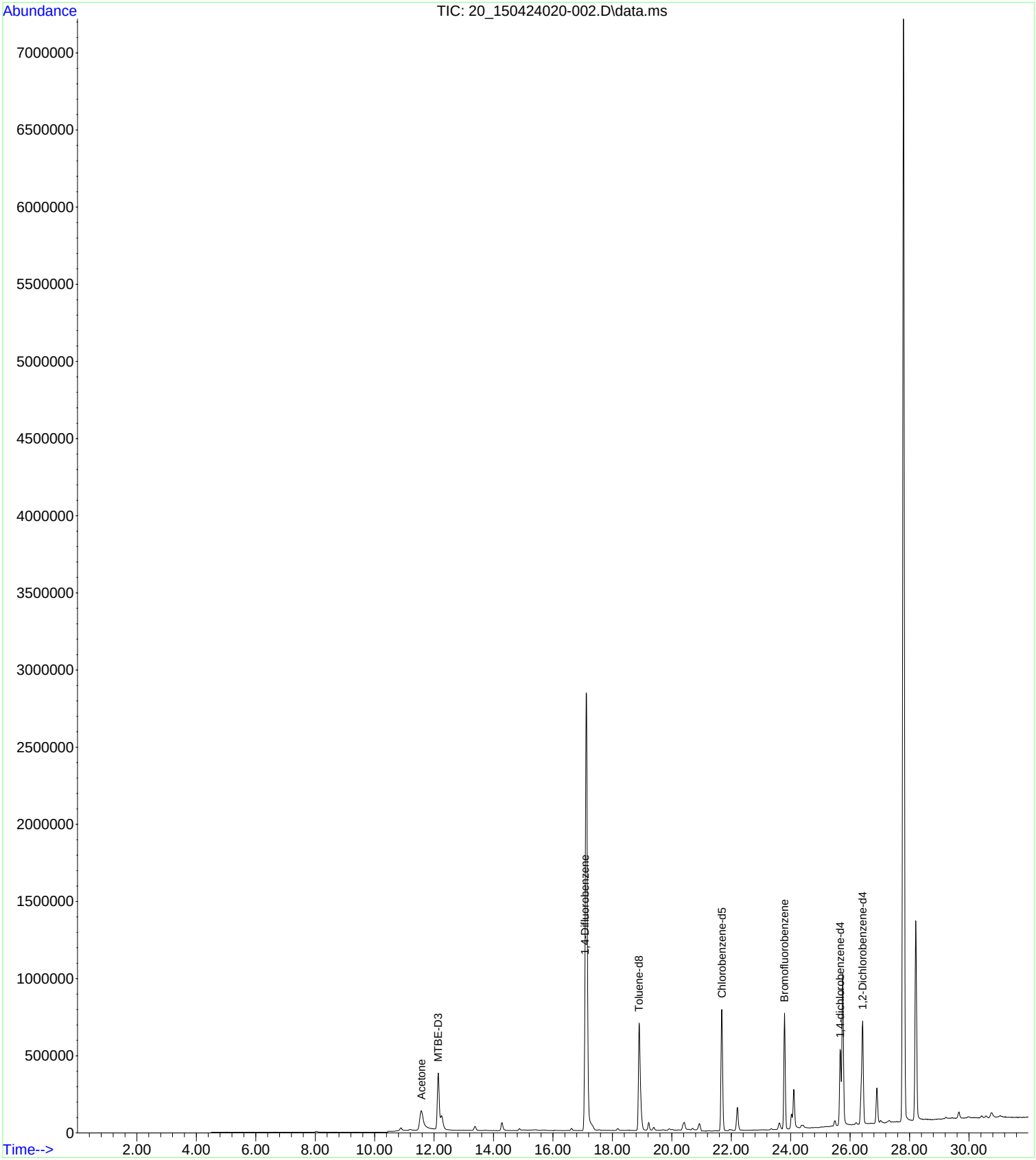
```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\APR\29\12_150424020-01 d
Operator    : SAT
Instrument  :   Saturn 2100
Acquired    : 29 Apr 15  16:58 using AcqMethod Voc8260.M
Sample Name: 12_150424020-01 DIL
Misc Info   : 10 X DIL
```



File :T:\Data2\Voc\HP5975\2015 DATA\MAY\04\1701017.D
Operator : SAT
Acquired : 4 May 2015 4:45 pm using AcqMethod 8260C.M
Instrument : 5975 VOC
Sample Name: 150424020-001 DUP
Misc Info : VOC GW 10X DIL
Vial Number: 17



```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\APR\27\20_150424020-002.D
Operator    : SAT
Acquired    : 27 Apr 15  22:48 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 20 150424020-002
Misc Info   : TB 102914
Vial Number: 0
```



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Sample Number	150424020-001	**Sampling Date**	4/21/2015	**Date/Time Received**	4/24/2015	11:25 AM
Client Sample ID	NSH-010-042115	**Sampling Time**	8:30 PM	**Extraction Date**	4/28/15	
Matrix	Water	**Sample Location**	W5D0434-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150424020-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	44.2	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.77	ug/L	5	95.4	62-139	4/28/2015	5/1/2015
Acenaphthene	4.42	ug/L	5	88.4	70-135	4/28/2015	5/1/2015
Acenaphthylene	4.19	ug/L	5	83.8	67-121	4/28/2015	5/1/2015
Anthracene	4.68	ug/L	5	93.6	63-113	4/28/2015	5/1/2015
Benzo(ghi)perylene	4.13	ug/L	5	82.6	71-141	4/28/2015	5/1/2015
Benzo[a]anthracene	4.61	ug/L	5	92.2	71-142	4/28/2015	5/1/2015
Benzo[a]pyrene	4.11	ug/L	5	82.2	71-143	4/28/2015	5/1/2015
2-Methylnaphthalene	4.83	ug/L	5	96.6	56-128	4/28/2015	5/1/2015
Benzo[k]fluoranthene	4.75	ug/L	5	95.0	69-149	4/28/2015	5/1/2015
Pyrene	4.89	ug/L	5	97.8	69-119	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	4.31	ug/L	5	86.2	68-138	4/28/2015	5/1/2015
Fluoranthene	4.91	ug/L	5	98.2	67-120	4/28/2015	5/1/2015
Fluorene	4.73	ug/L	5	94.6	60-116	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	4.17	ug/L	5	83.4	68-140	4/28/2015	5/1/2015
Naphthalene	3.90	ug/L	5	78.0	51-122	4/28/2015	5/1/2015
Phenanthrene	4.84	ug/L	5	96.8	71-126	4/28/2015	5/1/2015
Benzo[b]fluoranthene	4.66	ug/L	5	93.2	68-148	4/28/2015	5/1/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.54	ug/L	5	90.8	4.9	0-50	4/28/2015	5/1/2015
Acenaphthene	4.22	ug/L	5	84.4	4.6	0-50	4/28/2015	5/1/2015
Acenaphthylene	3.24	ug/L	5	64.8	25.6	0-50	4/28/2015	5/1/2015
Anthracene	4.45	ug/L	5	89.0	5.0	0-50	4/28/2015	5/1/2015
Benzo(ghi)perylene	3.88	ug/L	5	77.6	6.2	0-50	4/28/2015	5/1/2015
Benzo[a]anthracene	4.39	ug/L	5	87.8	4.9	0-50	4/28/2015	5/1/2015
Benzo[a]pyrene	3.40	ug/L	5	68.0	18.9	0-50	4/28/2015	5/1/2015
2-Methylnaphthalene	4.65	ug/L	5	93.0	3.8	0-50	4/28/2015	5/1/2015
Benzo[k]fluoranthene	4.41	ug/L	5	88.2	7.4	0-50	4/28/2015	5/1/2015
Pyrene	4.51	ug/L	5	90.2	8.1	0-50	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	4.19	ug/L	5	83.8	2.8	0-50	4/28/2015	5/1/2015
Fluoranthene	4.68	ug/L	5	93.6	4.8	0-50	4/28/2015	5/1/2015
Fluorene	4.51	ug/L	5	90.2	4.8	0-50	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	4.06	ug/L	5	81.2	2.7	0-50	4/28/2015	5/1/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150424020
Project Name: SVL #W5D0434

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.73	ug/L	5	74.6	4.5	0-50	4/28/2015	5/1/2015
Phenanthrene	4.68	ug/L	5	93.6	3.4	0-50	4/28/2015	5/1/2015
Benzo[b]fluoranthene	4.42	ug/L	5	88.4	5.3	0-50	4/28/2015	5/1/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/28/2015	5/1/2015
Acenaphthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Acenaphthylene	ND	ug/L	0.01	4/28/2015	5/1/2015
Anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Chrysene	ND	ug/L	0.01	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Fluorene	ND	ug/L	0.01	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Naphthalene	ND	ug/L	0.01	4/28/2015	5/1/2015
Phenanthrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150424020
Order Date: 4/24/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0434
Comment:

Sample #: 150424020-001 **Customer Sample #:** NSH-010-042115

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/21/2015
Quantity: 4 **Date Received:** 4/24/2015 11:25:00 AM **Time Collected:** 8:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/6/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/6/2015	***Normal (~10 Days)***

Sample #: 150424020-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/21/2015
Quantity: 1 **Date Received:** 4/24/2015 11:25:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/6/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.1
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0434

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 1.8

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY & ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N. 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: N.C. [illegible]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Date	Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3-Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZN AC	METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TDC, PAH	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-010-042115	4-21-15	2030	CG	Z	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		METALS AND SILICA SAMPLE WAS FILTERED WITH A 0.45 um DISPOSIBLE GROUNDWATER FILTER CAPSULE, PRESV. WITH HNO_3
2																									
3	TRIP BLANK					1																X			
4																									
5																									SHIPPED UPS # 1Z 9X8 989 23 1001 2659
6																									
7																									
8																									
9																									
10																									

Relinquished by: N.C. [illegible]	Date: 4/22/15	Time: 1500	Received by: [illegible]	Date: 4-23-15	Time: 10:00
Relinquished by: [illegible]	Date: 4/22/15	Time: 1505	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/1

S. Jacobson 4-23-15 1303

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-010-042115	W5D0434-01	Ground Water	21-Apr-15 20:30	CG	23-Apr-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Client Sample ID: **NSH-010-042115**
SVL Sample ID: **W5D0434-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 21-Apr-15 20:30
Received: 23-Apr-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	**Aluminum**	0.18	mg/L	0.08	0.04		W517257	DT	05/08/15 12:25	
EPA 200.7	**Calcium**	26.5	mg/L	0.040	0.029		W517257	DT	05/08/15 12:25	
EPA 200.7	**Iron**	0.150	mg/L	0.060	0.026		W517257	DT	05/08/15 12:25	
EPA 200.7	**Magnesium**	15.8	mg/L	0.20	0.11		W517257	DT	05/08/15 12:25	
EPA 200.7	**Potassium**	2.35	mg/L	0.50	0.17		W517257	DT	05/08/15 12:25	
EPA 200.7	**Silica (SiO2)**	48.1	mg/L	0.17	0.12		W517257	DT	05/08/15 12:25	
EPA 200.7	**Sodium**	48.9	mg/L	0.50	0.05		W517257	DT	05/08/15 12:25	
EPA 200.8	**Antimony**	0.00022	mg/L	0.00300	0.00019		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Arsenic**	0.00173	mg/L	0.00300	0.00027		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Barium**	0.0150	mg/L	0.00100	0.000099		W517285	KWH	05/05/15 09:52	
EPA 200.8	**Beryllium**	0.00063	mg/L	0.00020	0.000048		W517285	KWH	05/06/15 07:10	
EPA 200.8	**Boron**	0.0720	mg/L	0.0050	0.0012		W517285	KWH	05/06/15 07:10	
EPA 200.8	**Cadmium**	0.00044	mg/L	0.00020	0.000072		W517285	KWH	05/05/15 09:52	
EPA 200.8	**Chromium**	0.0010	mg/L	0.0015	0.0004		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Cobalt**	0.00008	mg/L	0.00100	0.000054		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Copper**	0.0342	mg/L	0.00100	0.00015		W517285	KWH	05/05/15 09:52	
EPA 200.8	**Lead**	0.00079	mg/L	0.00300	0.000031		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Manganese**	0.0231	mg/L	0.00100	0.000025		W517285	KWH	05/06/15 07:10	
EPA 200.8	**Molybdenum**	0.372	mg/L	0.00100	0.00009		W517285	KWH	05/05/15 09:52	
EPA 200.8	**Nickel**	0.0005	mg/L	0.0010	0.0004		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Selenium**	0.0012	mg/L	0.0030	0.0006		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Silver**	0.000055	mg/L	0.000100	0.000021		W517285	KWH	05/05/15 09:52	J
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W517285	KWH	05/05/15 09:52	U
EPA 200.8	**Uranium**	0.0180	mg/L	0.00100	0.000014		W517285	KWH	05/05/15 09:52	
EPA 200.8	**Vanadium**	0.0030	mg/L	0.0030	0.0009		W517285	KWH	05/05/15 09:52	J
EPA 200.8	**Zinc**	0.520	mg/L	0.0050	0.0010		W517285	KWH	05/05/15 09:52	M3
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W518029	STA	04/28/15 13:40	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	173	mg/L as CaCO3	1.0			W517113	DKS	04/24/15 10:14	
SM 2320B	**Bicarbonate**	173	mg/L as CaCO3	1.0			W517113	DKS	04/24/15 10:14	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W517113	DKS	04/24/15 10:14	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W517113	DKS	04/24/15 10:14	U
SM 2510 B	**Specific conductance**	400	µmhos/cm	5.00			W517296	JDM	04/24/15 14:15	
SM 2540 C	**Total Diss. Solids**	324	mg/L	10			W517307	RS	04/24/15 14:30	
SM 4500 H B	**pH @19.0°C**	8.27	pH Units				W517113	DKS	04/24/15 10:14	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W518090	VRH	04/28/15 13:46	U
SM 4500-P-E	**Orthophosphate as P**	0.016	mg/L	0.010	0.006		W517240	MCB	04/23/15 13:03	H6,Q14
SM 4500-S-F	Sulfide	< 0.27	mg/L	1.00	0.27		W518041	SM	04/27/15 16:45	U
SM 5310B	**Total Organic Carbon**	28.8	mg/L	1.00	0.24		W518028	SM	04/29/15 21:39	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Client Sample ID: **NSH-010-042115**
SVL Sample ID: **W5D0434-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 21-Apr-15 20:30
Received: 23-Apr-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	16.4	mg/L	2.00	0.56	10	W517185	MCE	04/23/15 11:46	D2
EPA 300.0	**Fluoride**	4.26	mg/L	0.100	0.022		W517185	MCE	04/23/15 11:34	
EPA 300.0	**Nitrate as N**	0.411	mg/L	0.050	0.008		W517185	MCE	04/23/15 11:34	
EPA 300.0	**Nitrite as N**	0.104	mg/L	0.050	0.014		W517185	MCE	04/23/15 11:34	
EPA 300.0	**Sulfate as SO4**	32.1	mg/L	0.30	0.05		W517185	MCE	04/23/15 11:34	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.85 meq/L Anion Sum: 4.85 meq/L C/A Balance: 0.03 % Calculated TDS: 301 TDS/cTDS: 1.08 TDS/eC: 0.81

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W517257	08-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W517257	08-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W517257	08-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W517257	08-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W517257	08-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W517257	08-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W517257	08-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517285	05-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517285	05-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517285	05-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517285	06-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W517285	06-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517285	05-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517285	05-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517285	05-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517285	05-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517285	05-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517285	06-May-15	U
EPA 200.8	Molybdenum	mg/L	0.00009	0.00009	0.00100	W517285	05-May-15	J
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517285	05-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517285	05-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517285	05-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517285	05-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517285	05-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517285	05-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W517285	05-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W518029	28-Apr-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.33		1.0	W517113	24-Apr-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.33		1.0	W517113	24-Apr-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W517113	24-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W517113	24-Apr-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W517307	24-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W518090	28-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W517240	23-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W518041	27-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W518028	29-Apr-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W517185	23-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W517185	23-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W517185	23-Apr-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W517185	23-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W517185	23-Apr-15	U

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.95	1.00	95.2	85 - 115	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	18.8	20.0	93.9	85 - 115	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.40	10.0	94.0	85 - 115	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	18.7	20.0	93.5	85 - 115	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	19.9	20.0	99.7	85 - 115	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	97.9	85 - 115	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	17.9	19.0	94.0	85 - 115	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0258	0.0250	103	85 - 115	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0260	0.0250	104	85 - 115	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0264	0.0250	106	85 - 115	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0258	0.0250	103	85 - 115	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.0250	0.0250	99.8	85 - 115	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0260	0.0250	104	85 - 115	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0245	0.0250	97.8	85 - 115	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0245	0.0250	97.9	85 - 115	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0240	0.0250	96.0	85 - 115	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0263	0.0250	105	85 - 115	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0251	0.0250	100	85 - 115	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.0251	0.0250	100	85 - 115	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0242	0.0250	96.8	85 - 115	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0266	0.0250	106	85 - 115	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0258	0.0250	103	85 - 115	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0262	0.0250	105	85 - 115	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0254	0.0250	102	85 - 115	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0249	0.0250	99.7	85 - 115	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.0253	0.0250	101	85 - 115	W517285	05-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00507	0.00500	101	85 - 115	W518029	28-Apr-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	99.8	99.3	101	85 - 115	W517113	24-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	99.8	99.3	101	85 - 115	W517113	24-Apr-15	
SM 2510 B	Specific conductance	µmhos/cm	285	306	93.0	90 - 110	W517296	24-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.161	0.150	107	90 - 110	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.796	0.786	101	90 - 110	W517240	23-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.29	2.50	91.7	80 - 120	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	34.4	34.3	100	90 - 110	W518028	29-Apr-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.98	3.00	99.4	90 - 110	W517185	23-Apr-15	
EPA 300.0	Fluoride	mg/L	2.01	2.00	101	90 - 110	W517185	23-Apr-15	
EPA 300.0	Nitrate as N	mg/L	2.07	2.01	103	90 - 110	W517185	23-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.66	2.51	106	90 - 110	W517185	23-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.97	10.0	99.7	90 - 110	W517185	23-Apr-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	173	173	0.2	20	W517113	24-Apr-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	173	173	0.2	20	W517113	24-Apr-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W517113	24-Apr-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W517113	24-Apr-15	U
SM 2510 B	Specific conductance	µmhos/cm	402	400	0.5	20	W517296	24-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	397	392	1.3	10	W517307	24-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	603	585	3.0	10	W517307	24-Apr-15	
SM 4500 H B	pH	pH Units	8.19	8.27	1.0	20	W517113	24-Apr-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.14	0.18	1.00	96.3	70 - 130	W517257	08-May-15	
EPA 200.7	Aluminum	mg/L	2.33	1.39	1.00	93.4	70 - 130	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	44.9	26.5	20.0	92.1	70 - 130	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	44.7	26.0	20.0	93.5	70 - 130	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.54	0.150	10.0	93.9	70 - 130	W517257	08-May-15	
EPA 200.7	Iron	mg/L	41.5	32.7	10.0	87.7	70 - 130	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	34.5	15.8	20.0	93.5	70 - 130	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	20.5	1.18	20.0	96.8	70 - 130	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	22.3	2.35	20.0	99.8	70 - 130	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	21.1	0.28	20.0	104	70 - 130	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.0	48.1	10.7	103	70 - 130	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	14.2	3.62	10.7	98.9	70 - 130	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	67.1	48.9	19.0	95.9	70 - 130	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	18.7	0.06	19.0	98.0	70 - 130	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0247	0.00022	0.0250	98.0	70 - 130	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0283	0.00173	0.0250	106	70 - 130	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0418	0.0150	0.0250	107	70 - 130	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0254	0.00063	0.0250	99.1	70 - 130	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.0943	0.0720	0.0250	89.5	70 - 130	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0260	0.00044	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0248	0.0010	0.0250	95.1	70 - 130	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0238	0.00008	0.0250	95.1	70 - 130	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0588	0.0342	0.0250	98.4	70 - 130	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0260	0.00079	0.0250	101	70 - 130	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0472	0.0231	0.0250	96.4	70 - 130	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.402	0.372	0.0250	122	70 - 130	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0235	0.0005	0.0250	91.9	70 - 130	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0301	0.0012	0.0250	116	70 - 130	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0243	0.000055	0.0250	97.0	70 - 130	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0256	<0.000026	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0435	0.0180	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0030	0.0250	99.9	70 - 130	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.560	0.520	0.0250	R > 4S	70 - 130	W517285	05-May-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00105	<0.00004	0.00100	105	70 - 130	W518029	28-Apr-15	
EPA 245.1	Mercury	mg/L	0.00107	<0.00004	0.00100	107	70 - 130	W518029	28-Apr-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	<0.0025	0.100	111	75 - 125	W518090	28-Apr-15	

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.504	0.016	0.500	97.6	75 - 125	W517240	23-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.41	<0.39	2.50	96.6	80 - 120	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	49.6	0.37	50.0	98.4	80 - 120	W518028	29-Apr-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	45.7	42.5	3.00	108	90 - 110	W517185	23-Apr-15	D2,M3
EPA 300.0	Chloride	mg/L	110	111	3.00	R > 4S	90 - 110	W517185	23-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.63	0.493	2.00	107	90 - 110	W517185	23-Apr-15	
EPA 300.0	Fluoride	mg/L	2.72	0.557	2.00	108	90 - 110	W517185	23-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.22	1.00	2.00	111	90 - 110	W517185	23-Apr-15	M1
EPA 300.0	Nitrate as N	mg/L	5.81	3.59	2.00	111	90 - 110	W517185	23-Apr-15	M1
EPA 300.0	Nitrite as N	mg/L	2.44	<0.014	2.00	122	90 - 110	W517185	23-Apr-15	M1
EPA 300.0	Nitrite as N	mg/L	2.78	0.245	2.00	127	90 - 110	W517185	23-Apr-15	M1
EPA 300.0	Sulfate as SO4	mg/L	40.5	29.5	10.0	110	90 - 110	W517185	23-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	54.0	44.3	10.0	97.1	90 - 110	W517185	23-Apr-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.14	1.14	1.00	96.5	0.2	20	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	45.3	44.9	20.0	93.9	0.8	20	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.58	9.54	10.0	94.3	0.4	20	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	34.8	34.5	20.0	95.2	1.0	20	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	22.5	22.3	20.0	101	0.8	20	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.4	59.0	10.7	106	0.5	20	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	67.5	67.1	19.0	98.2	0.7	20	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0256	0.0247	0.0250	102	3.6	20	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0289	0.0283	0.0250	109	2.2	20	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0420	0.0418	0.0250	108	0.7	20	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0281	0.0254	0.0250	110	10.1	20	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.102	0.0943	0.0250	119	7.5	20	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0265	0.0260	0.0250	104	1.8	20	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0254	0.0248	0.0250	97.9	2.8	20	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0244	0.0238	0.0250	97.2	2.2	20	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0593	0.0588	0.0250	100	0.8	20	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0264	0.0260	0.0250	103	1.5	20	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0503	0.0472	0.0250	109	6.3	20	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.404	0.402	0.0250	127	0.3	20	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0240	0.0235	0.0250	93.9	2.1	20	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0309	0.0301	0.0250	119	2.5	20	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0247	0.0243	0.0250	98.6	1.6	20	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0258	0.0256	0.0250	103	0.9	20	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0436	0.0435	0.0250	102	0.3	20	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0287	0.0280	0.0250	103	2.6	20	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.561	0.560	0.0250	R > 4S	0.3	20	W517285	05-May-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00107	0.00105	0.00100	107	1.9	20	W518029	28-Apr-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	0.111	0.100	111	0.0	20	W518090	28-Apr-15	

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0434**
Reported: 08-May-15 14:26

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)											
SM 4500-P-E	Orthophosphate as P	mg/L	0.511	0.504	0.500	98.9	1.2	20	W517240	23-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.45	2.41	2.50	98.2	1.7	20	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	48.6	49.6	50.0	96.5	2.0	20	W518028	29-Apr-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	44.4	45.7	3.00	R > 4S	3.0	20	W517185	23-Apr-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.66	2.63	2.00	108	1.0	20	W517185	23-Apr-15	
EPA 300.0	Nitrate as N	mg/L	3.24	3.22	2.00	112	0.6	20	W517185	23-Apr-15	M1
EPA 300.0	Nitrite as N	mg/L	2.47	2.44	2.00	123	1.2	20	W517185	23-Apr-15	M1
EPA 300.0	Sulfate as SO4	mg/L	40.6	40.5	10.0	111	0.2	20	W517185	23-Apr-15	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Friday, May 29, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1504589
Project Name:
Project Number: W5D0464

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 4/30/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1504589

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met with the following exception:

U-234 activity is reported in the associated method blank above the minimum detectable concentration value. The measured blank activity is below the requested MDC (pCi/L) Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1504589
Client Name: SVL Analytical
Client Project Name:
Client Project Number: W5D0464
Client PO Number: 15256

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-014B-042315	1504589-1		WATER	23-Apr-15	14:30

ALS

1504589

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #: W5D0464
TEMP on Receipt:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15256

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross alpha 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972	Rush Instructions (Days)	Comments
1	N5H-014B-042315	4/23/15	14:30		2	3			X					X	X	X		Please call Chris Meyer with Questions
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
A Jacobson	4-27-15	1242	Ex Pelh	4/30/15	1205
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1504589

Project Manager: JRK Initials: ECP Date: 4/30/15

1.	Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2.	Are custody seals on shipping containers intact?	NONE	(YES)	NO
3.	Are Custody seals on sample containers intact?	(NONE)	YES	NO
4.	Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5.	Are the COC and bottle labels complete and legible?		(YES)	NO
6.	Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7.	Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8.	Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9.	Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10.	Is there sufficient sample for the requested analyses?		(YES)	NO
11.	Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12.	Are all samples within holding times for the requested analyses?		(YES)	NO
13.	Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	(N/A)	YES	NO
15.	Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	(YES)	NO
16.	Were the samples shipped on ice?		YES	(NO)
17.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	(NO)

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	9							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

15) 1-1, 1-2, 1-3 ≈ 2"

If applicable, was the client contacted? YES / NO / (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 4-30-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1504589

SHIPPING
(208) 784-1258
SVL ANALYTICAL
M GOVERNMENT GULCH
KELLOGG ID 83837

16 LBS

1 OF 1

DWT: 24,15,16

9
-1

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4525 2523

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

RRD R 0215

Client: SVL Analytical
Project: W5D0464
Sample ID: NSH-014B-042315
Legal Location:
Collection Date: 4/23/2015 14:30

Date: *29-May-15*
Work Order: 1504589
Lab ID: 1504589-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **5/22/2015**	PrepBy: **DKL**
GROSS ALPHA	**275 (+/- 49)**	M3	**17**	**pCi/l**	NA	5/26/2015 14:16
GROSS BETA	**169 (+/- 31)**	M3	**23**	**pCi/l**	NA	5/26/2015 14:16
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **5/22/2015**	PrepBy: **TDE**
Tracer: U-232	*66.1*		*30-110*	*%REC*	DL = NA	5/25/2015 14:44
U-234	**10.5 (+/- 1.9)**		**0.1**	**pCi/l**	NA	5/25/2015 14:44
U-235	**0.53 (+/- 0.2)**		**0.12**	**pCi/l**	NA	5/25/2015 14:44
U-238	**9.2 (+/- 1.7)**		**0.1**	**pCi/l**	NA	5/25/2015 14:44
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/18/2015**	PrepBy: **PJW**
Ra-226	**5 (+/- 1.3)**		**0.1**	**pCi/l**	NA	5/22/2015 13:18
Carr: BARIUM	*95.5*		*40-110*	*%REC*	DL = NA	5/22/2015 13:18
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **5/11/2015**	PrepBy: **DKL**
Ra-228	**6.6 (+/- 1.6)**		**0.5**	**pCi/l**	NA	5/14/2015 08:35
Carr: BARIUM	*95.5*		*40-110*	*%REC*	DL = NA	5/14/2015 08:35

Client:	SVL Analytical	**Date:**	*29-May-15*
Project:	W5D0464	**Work Order:**	1504589
Sample ID:	NSH-014B-042315	**Lab ID:**	1504589-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/23/2015 14:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1504589
Project: W5D0464

Date: *5/29/2015 8:41:*

QC BATCH REPORT

Batch ID: **RE150518-1-2** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150518-1** Units: **pCi/l** Analysis Date: **5/22/2015 13:53**

Client ID: Run ID: **RE150518-1A** Prep Date: **5/18/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.6 (+/- 7.5)	0.2	30.71		96.3	67-120					P
Carr: BARIUM	31330		33840		92.6	40-110					

MB Sample ID: **RE150518-1** Units: **pCi/l** Analysis Date: **5/22/2015 13:53**

Client ID: Run ID: **RE150518-1A** Prep Date: **5/18/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.143									U
Carr: BARIUM	31970		33840		94.5	40-110					

The following samples were analyzed in this batch: 1504589-1

Client: SVL Analytical
Work Order: 1504589
Project: W5D0464

QC BATCH REPORT

Batch ID: **AS150521-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150521-1** Units: **pCi/l** Analysis Date: **5/25/2015 14:44**

Client ID: Run ID: **AS150521-1U** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.69 (+/- 0.83)	0.06	4.416		106	82-122					P
U-238	4.72 (+/- 0.84)	0.03	4.585		103	78-126					P
Tracer: U-232	3.38	0.06	4.166		81.2	30-110					

MB Sample ID: **AS150521-1** Units: **pCi/l** Analysis Date: **5/25/2015 14:44**

Client ID: Run ID: **AS150521-1U** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	0.031 (+/- 0.025)	0.029									B3
U-235	ND	0.034									U
U-238	ND	0.024									U
Tracer: U-232	3.97	0.06	4.166		95.2	30-110					

The following samples were analyzed in this batch: 1504589-1

Client: SVL Analytical
Work Order: 1504589
Project: W5D0464

QC BATCH REPORT

Batch ID: **AB150522-1-2** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150522-1** Units: **pCi/l** Analysis Date: **5/27/2015 11:24**

Client ID: Run ID: **AB150522-1A** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	218 (+/- 36)	3	224.2		97.3	70-130					P
GROSS BETA	218 (+/- 36)	6	203.7		107	70-130					P,M3

MB Sample ID: **AB150522-1** Units: **pCi/l** Analysis Date: **5/27/2015 14:33**

Client ID: Run ID: **AB150522-1A** Prep Date: **5/22/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.64									U
GROSS BETA	ND	1.04									U

The following samples were analyzed in this batch: 1504589-1

Client: SVL Analytical
Work Order: 1504589
Project: W5D0464

QC BATCH REPORT

Batch ID: **RA150511-1-2** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150511-1** Units: **pCi/l** Analysis Date: **5/14/2015 08:46**

Client ID: Run ID: **RA150511-1A** Prep Date: **5/11/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8 (+/- 1.9)	0.6	7.792		103	70-130					P
Carr: BARIUM	31330		33840		92.6	40-110					

MB Sample ID: **RA150511-1** Units: **pCi/l** Analysis Date: **5/14/2015 08:46**

Client ID: Run ID: **RA150511-1A** Prep Date: **5/11/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.56									U
Carr: BARIUM	31970		33840		94.5	40-110					

The following samples were analyzed in this batch: 1504589-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	NSH-014B-042315	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0464-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	12.5	5/7/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	NSH-014B-042315	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0464-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	NSH-014B-042315	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0464-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Toluene	782	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150428024-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.8	70-130
Bromofluorobenzene	EPA 524.3	94.0	70-130
Toluene-d8	EPA 524.3	95.4	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001A	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	NSH-014B-042315 DUPLICATE	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0464-01		
Comments	VOC Sample Duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	12.5	5/8/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001A	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	NSH-014B-042315 DUPLICATE	**Sampling Time**	2:30 PM		
Matrix	Water	**Sample Location**	W5D0464-01		
Comments	VOC Sample Duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001A	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015	10:20 AM
Client Sample ID	NSH-014B-042315 DUPLICATE	**Sampling Time**	2:30 PM			
Matrix	Water	**Sample Location**	W5D0464-01			
Comments	VOC Sample Duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Toluene	762	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	2.5	5/8/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150428024-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.6	70-130
Bromofluorobenzene	EPA 524.3	91.8	70-130
Toluene-d8	EPA 524.3	100.4	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-002	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0464-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Acetone	24.5	ug/L	0.5	2.5	5/4/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-002	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0464-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-002	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015 10:20 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5D0464-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	5/4/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150428024-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	100.0	70-130
Bromofluorobenzene	EPA 524.3	100.0	70-130
Toluene-d8	EPA 524.3	98.0	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
Toluene	9.82	ug/L	10	98.2	70-130	5/7/2015	5/7/2015
Tetrachloroethene	10.3	ug/L	10	103.0	70-130	5/7/2015	5/7/2015
Ethylbenzene	9.96	ug/L	10	99.6	70-130	5/7/2015	5/7/2015
Chlorobenzene	9.63	ug/L	10	96.3	70-130	5/7/2015	5/7/2015
Benzene	9.85	ug/L	10	98.5	70-130	5/7/2015	5/7/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150501011-001	Trichloroethene	ND	9.42	ug/L	10	94.2	70-130	5/7/2015	5/7/2015
150501011-001	Toluene	ND	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
150501011-001	Tetrachloroethene	ND	7.62	ug/L	10	76.2	70-130	5/7/2015	5/7/2015
150501011-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-130	5/7/2015	5/7/2015
150501011-001	Chlorobenzene	ND	9.52	ug/L	10	95.2	70-130	5/7/2015	5/7/2015
150501011-001	Benzene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015
150501011-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.07	ug/L	10	90.7	3.8	0-30	5/7/2015	5/7/2015
Toluene	10.4	ug/L	10	104.0	3.8	0-30	5/7/2015	5/7/2015
Tetrachloroethene	7.56	ug/L	10	75.6	0.8	0-30	5/7/2015	5/7/2015
Ethylbenzene	10.3	ug/L	10	103.0	1.0	0-30	5/7/2015	5/7/2015
Chlorobenzene	9.68	ug/L	10	96.8	1.7	0-30	5/7/2015	5/7/2015
Benzene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-dichloropropene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
2-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
4-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Acetone	ND	ug/L	2.5	5/7/2015	5/7/2015
Benzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromodichloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromoform	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Chlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroform	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Ethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/7/2015	5/7/2015
Isopropylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Methylene chloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Naphthalene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Propylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
p-isopropyltoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
sec-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Styrene	ND	ug/L	0.5	5/7/2015	5/7/2015
tert-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Tetrachloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Toluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Total Xylene	ND	ug/L	0.5	5/7/2015	5/7/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Vinyl Chloride	ND	ug/L	0.5	5/7/2015	5/7/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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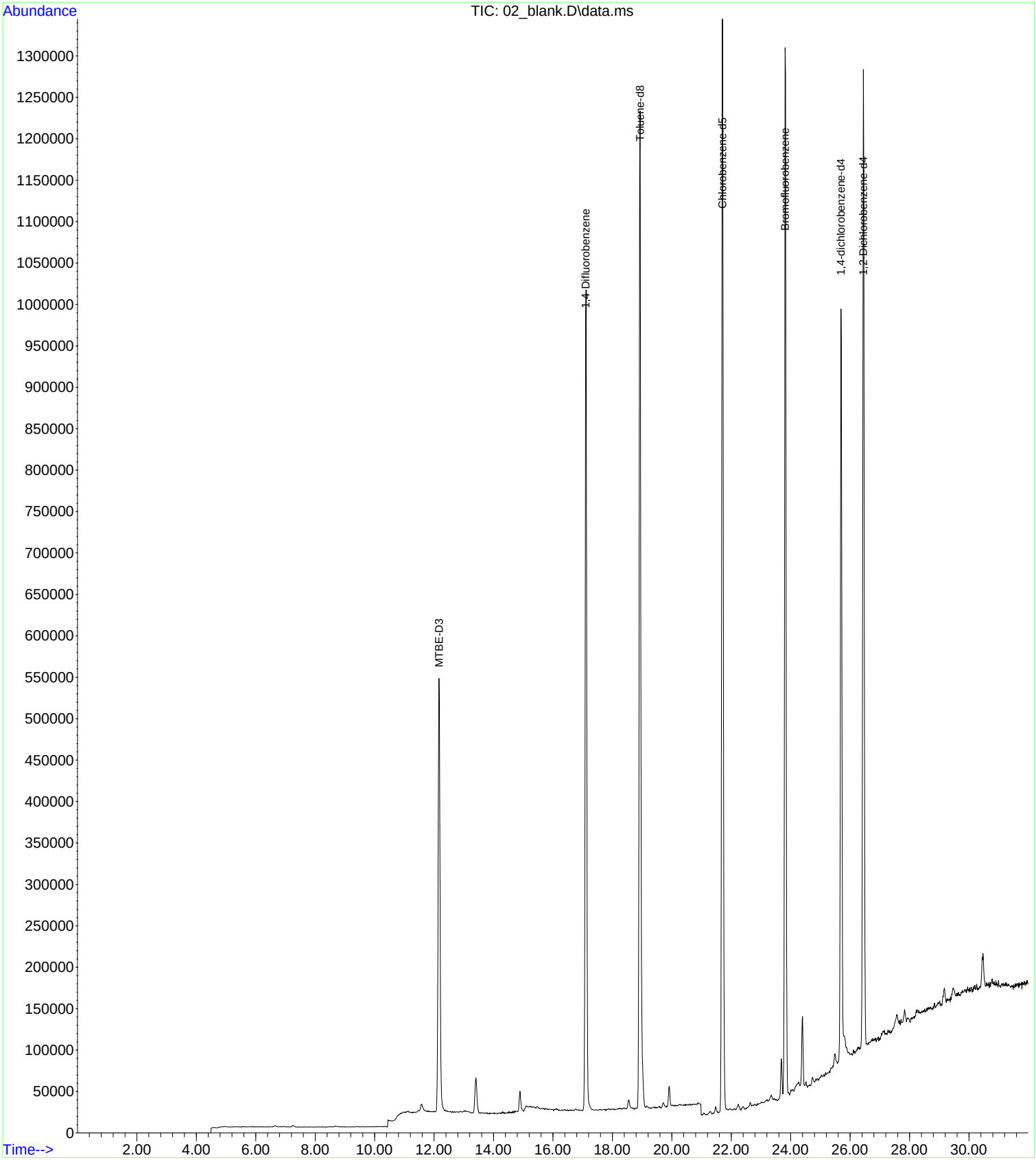
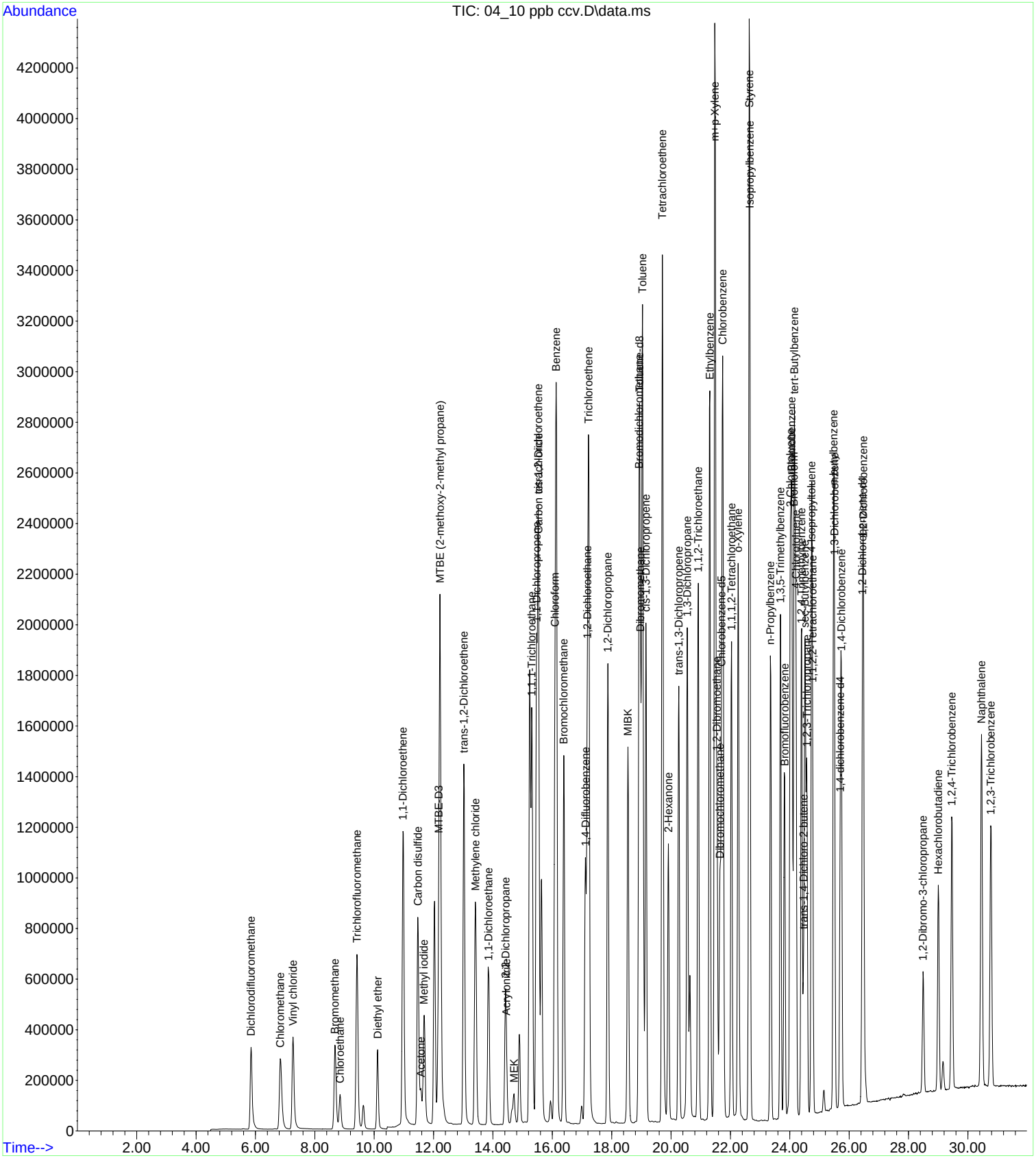
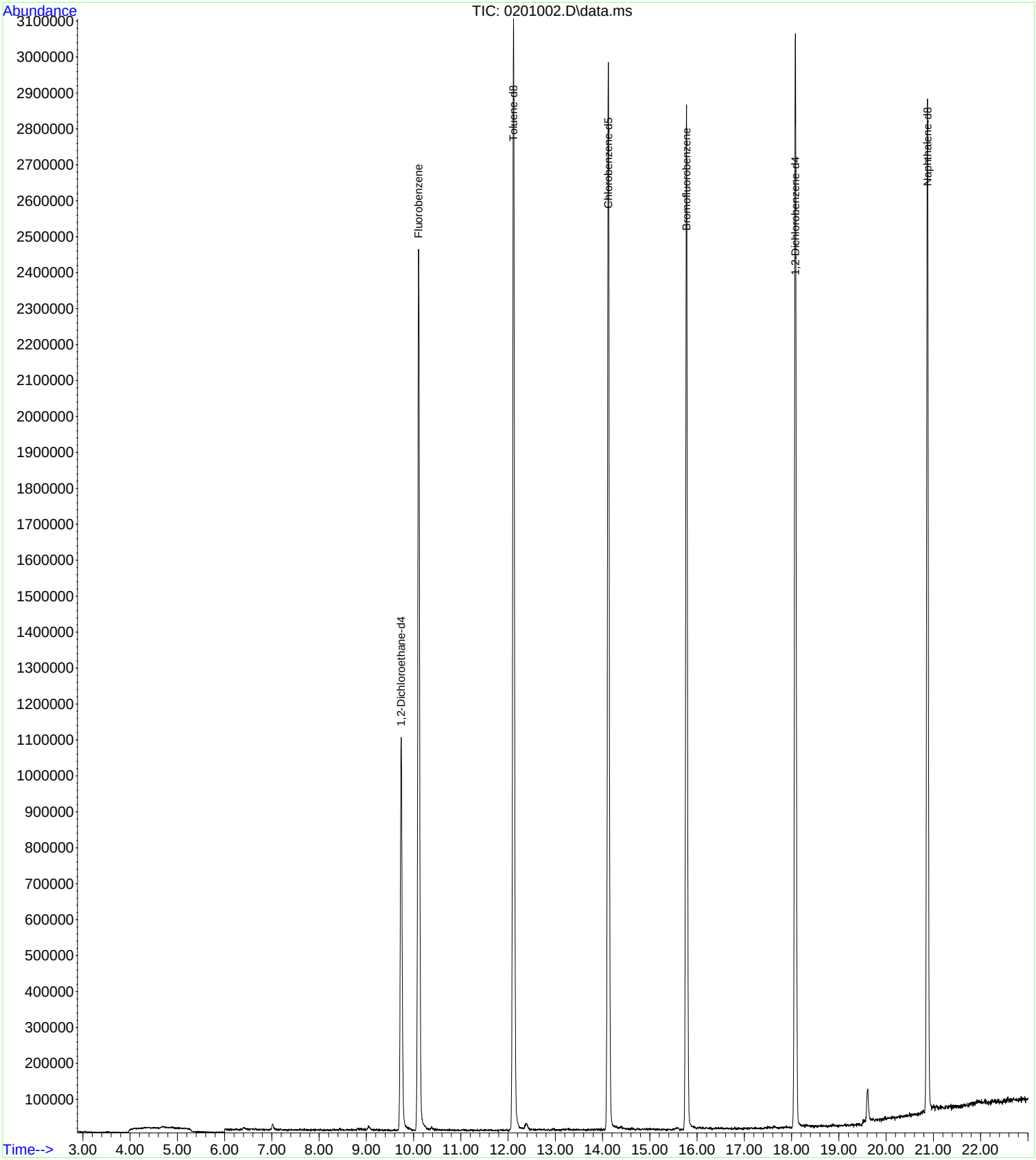
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\02_blank.D
Operator    : TGT
Acquired    : 07 May 2015  11:32 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 02 BLANK
Misc Info  :   Varian 2100 GC/MS
Vial Number: 0
```



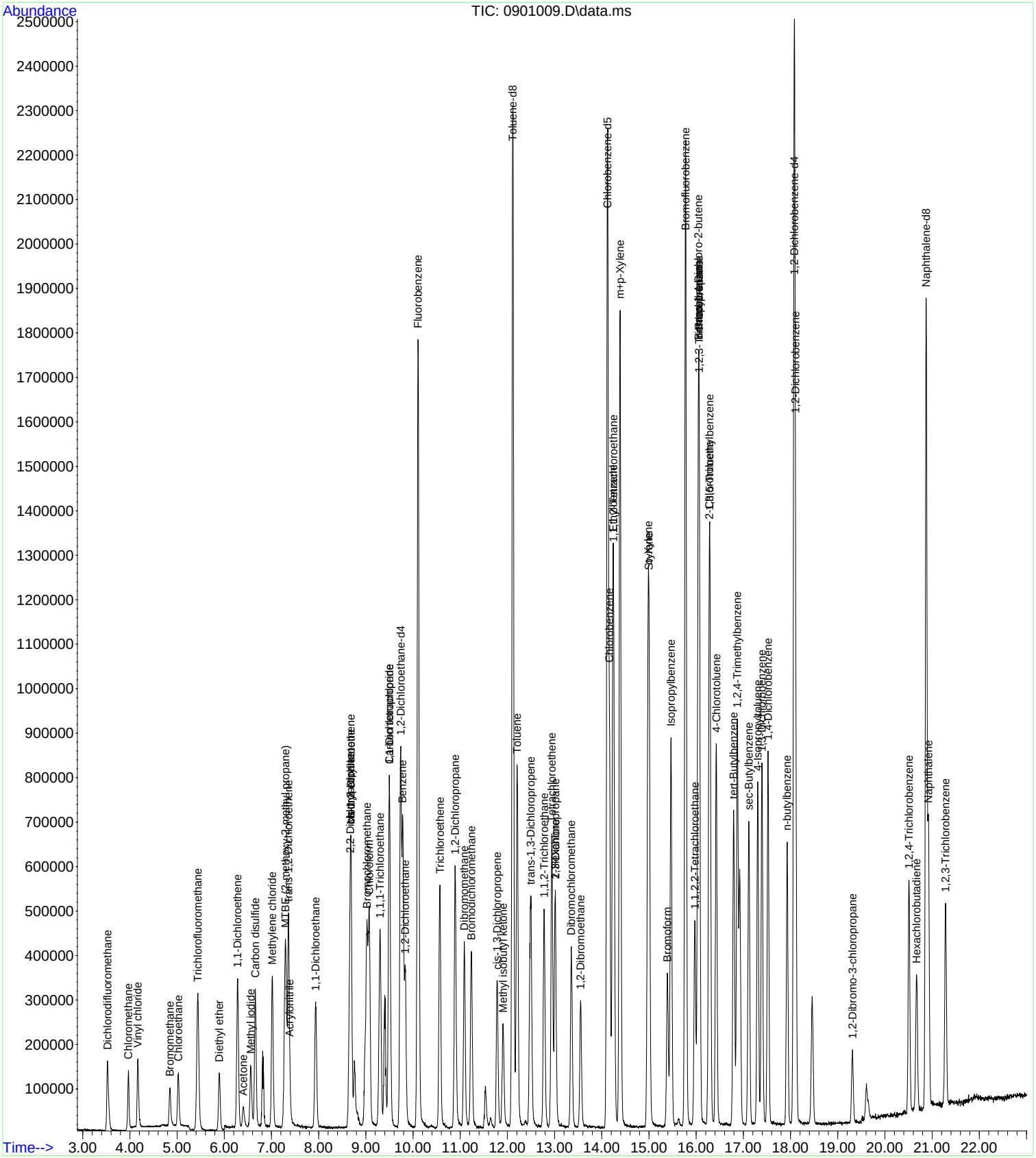
File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\04_10 ppb ccv.D
Operator : TGT
Acquired : 07 May 2015 12:52 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 04 10 PPB CCV
Misc Info : Varian 2100 GC/MS
Vial Number: 0



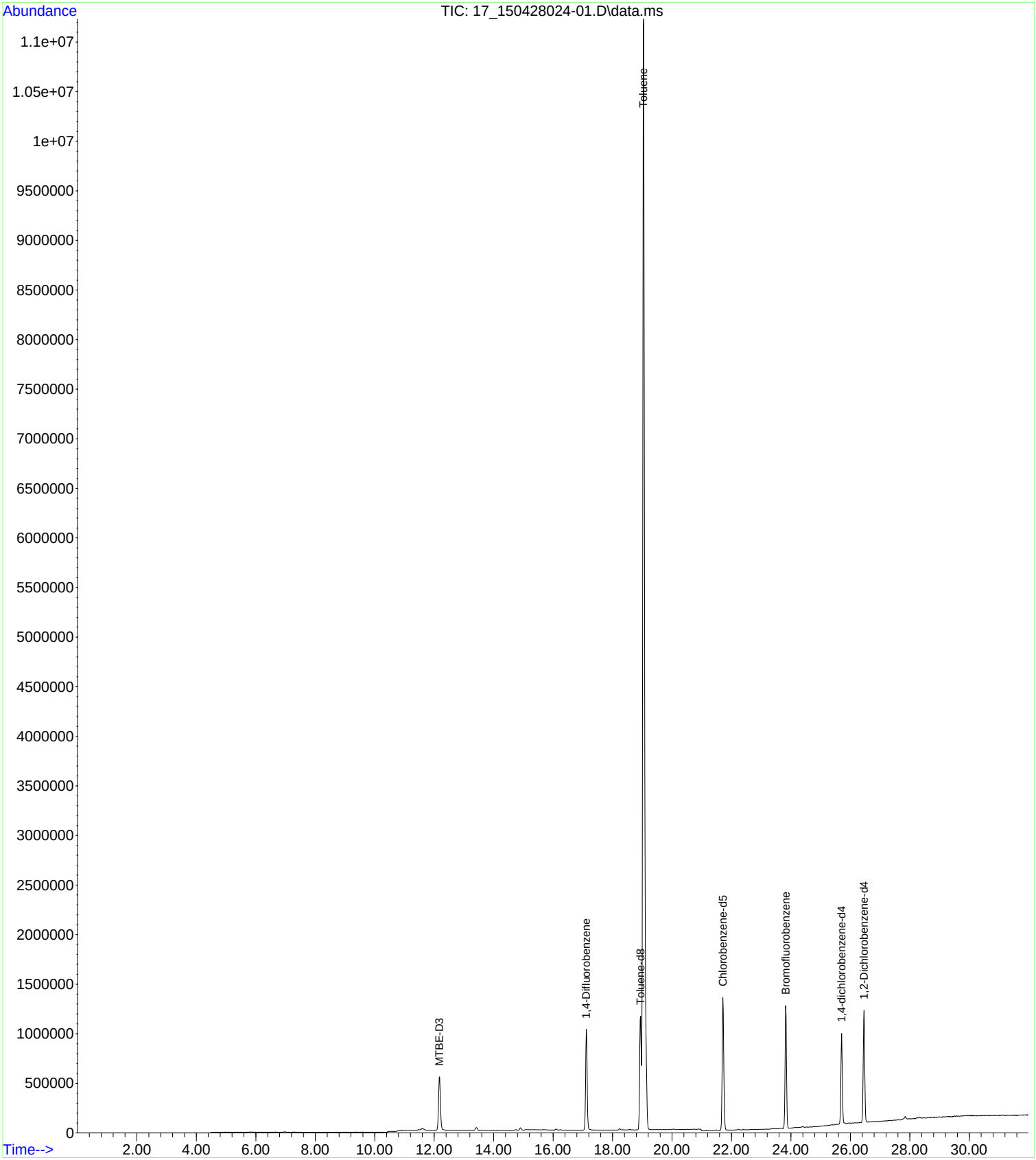
File :T:\Data2\Voc\HP5975\2015 DATA\MAY\04\0201002.D
Operator : SAT
Acquired : 4 May 2015 9:00 am using AcqMethod 8260C.M
Instrument : 5975 VOC
Sample Name: BLANK
Misc Info : Agilent 5975 GC/MS
Vial Number: 2



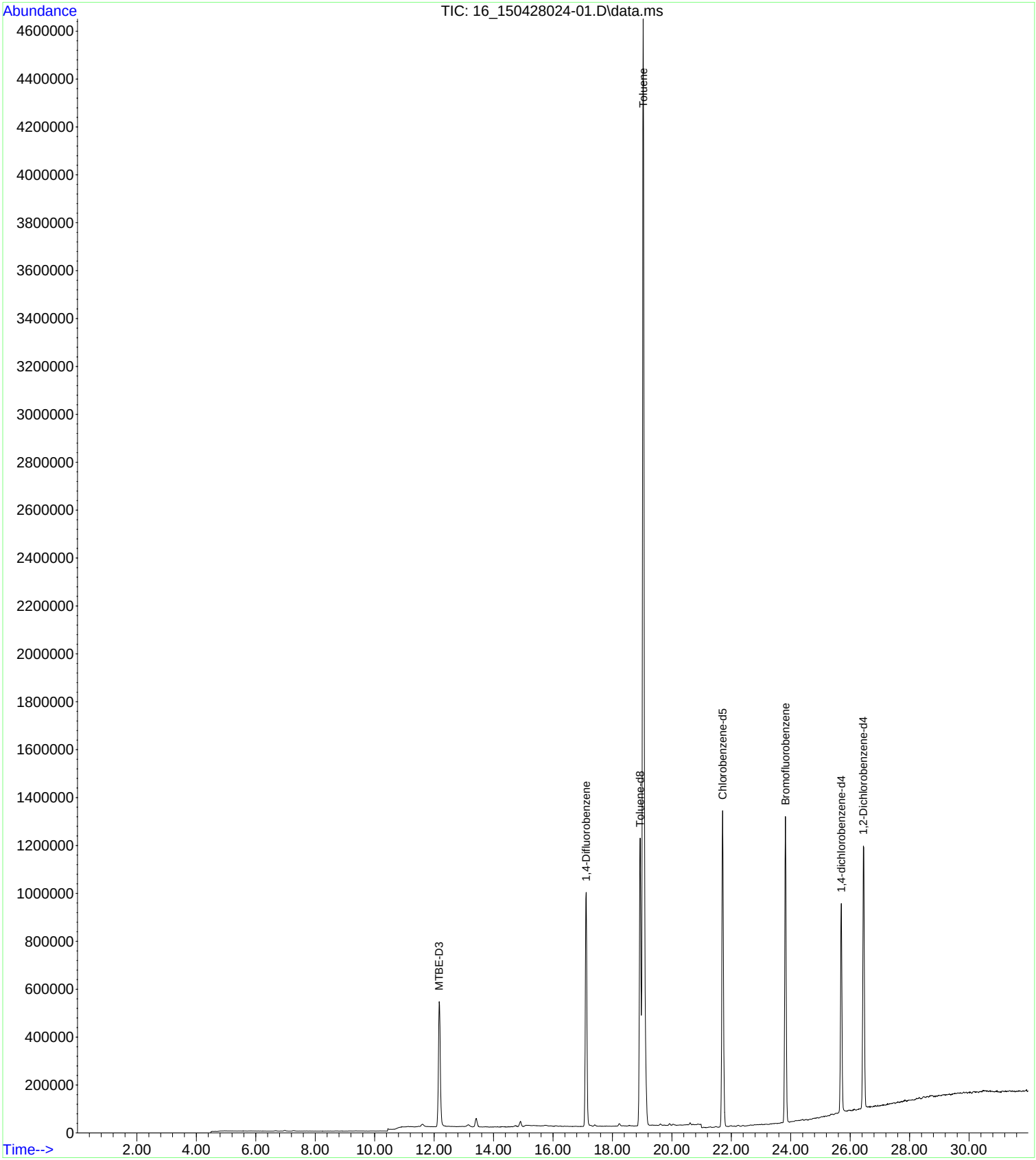
File :T:\Data2\Voc\HP5975\2015 DATA\MAY\04\0901009.D
Operator : SAT
Acquired : 4 May 2015 12:37 pm using AcqMethod 8260C.M
Instrument : 5975 VOC
Sample Name: 10 PPB CCV
Misc Info : Agilent 5975 GC/MS
Vial Number: 9



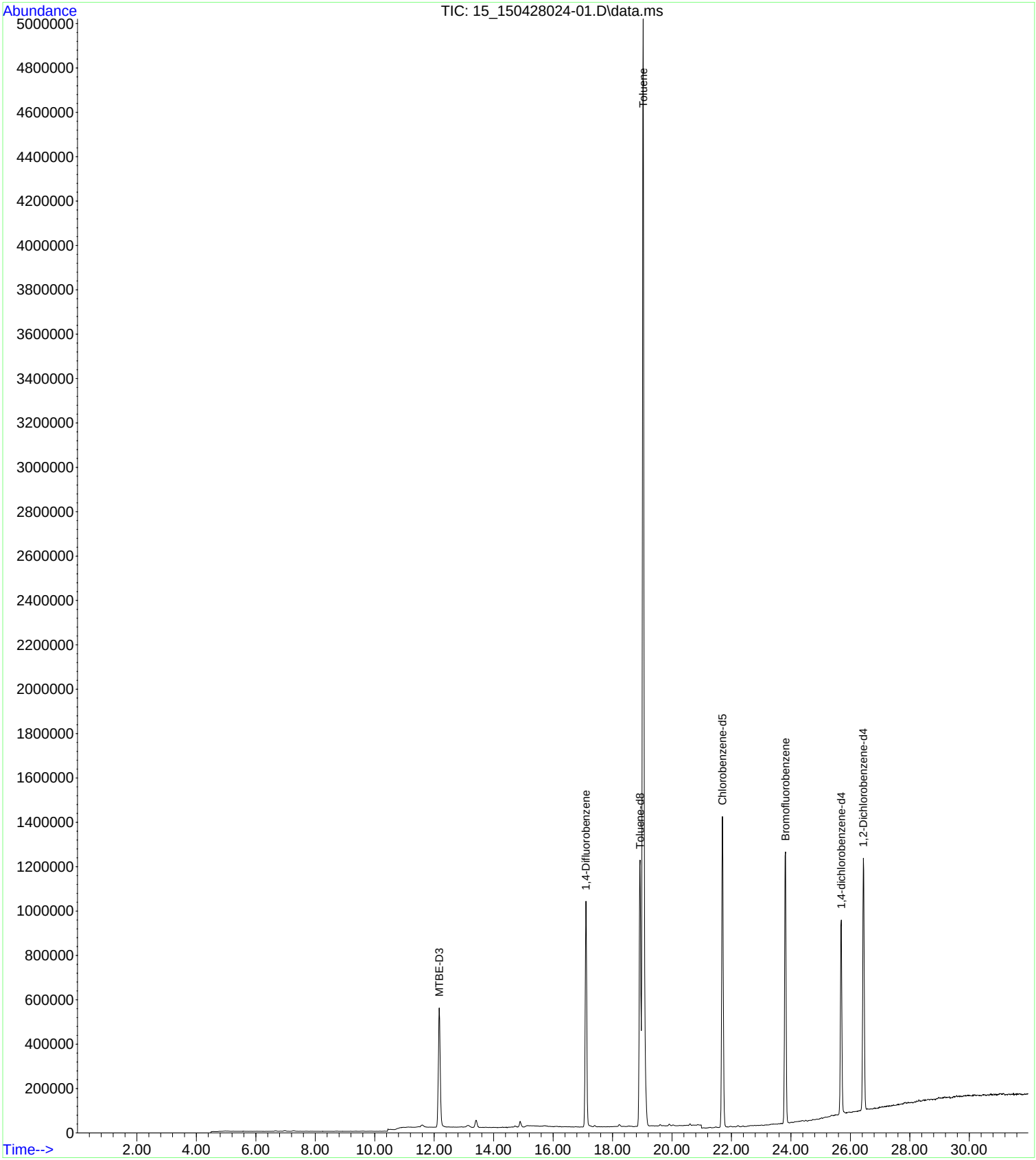
```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\17_150428024-01.D
Operator    : TGT
Acquired    : 07 May 15  22:11 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 17 150428024-01
Misc Info   : 20X DIL
Vial Number: 0
```



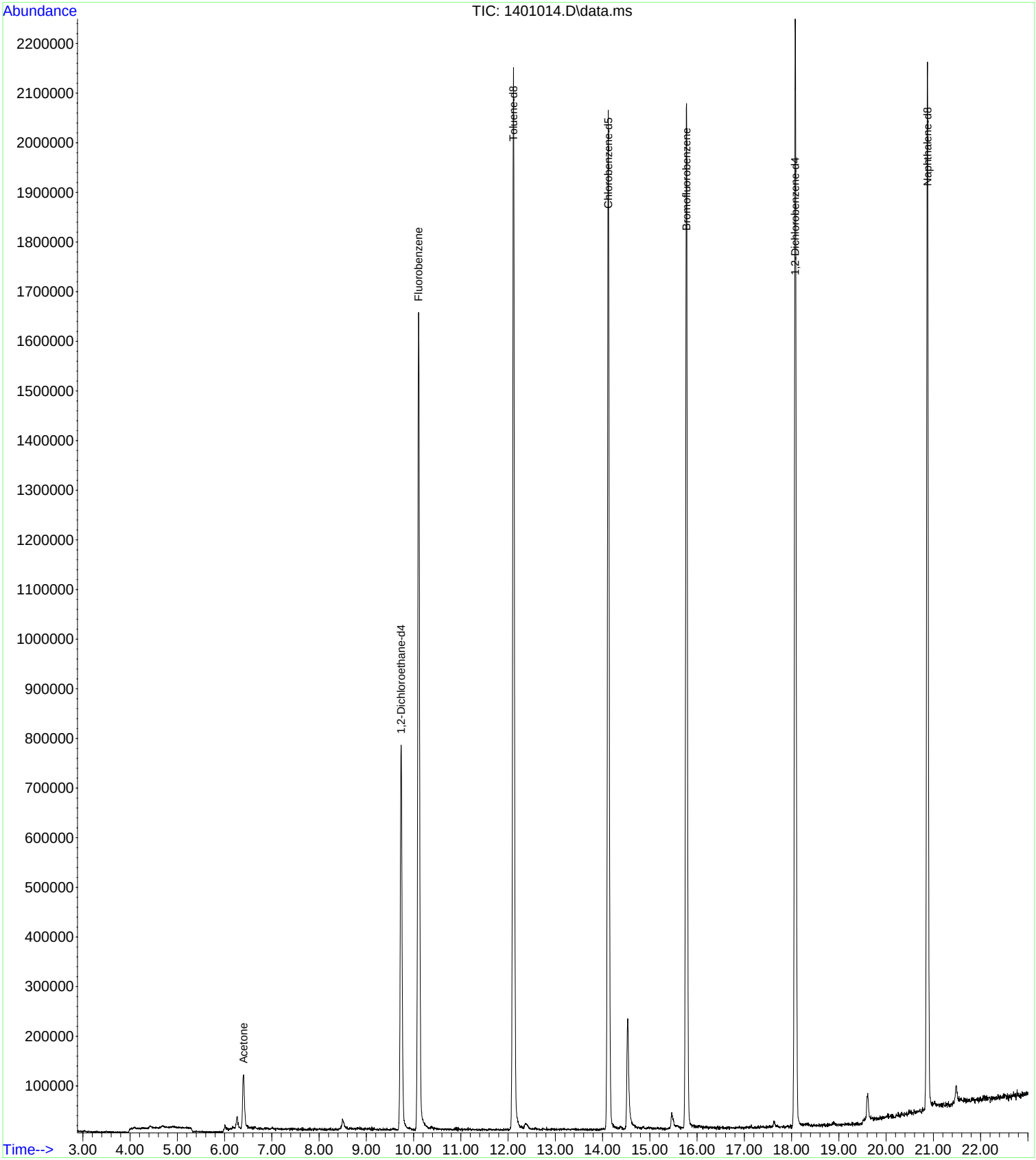
File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\16_150428024-01.D
Operator : SAT
Acquired : 08 May 15 18:47 using AcqMethod Voc8260.M
Instrument : Saturn 2100Saturn 2100Saturn 21000
Sample Name: 16 150428024-01
Misc Info : 50X DIL
Vial Number: 0



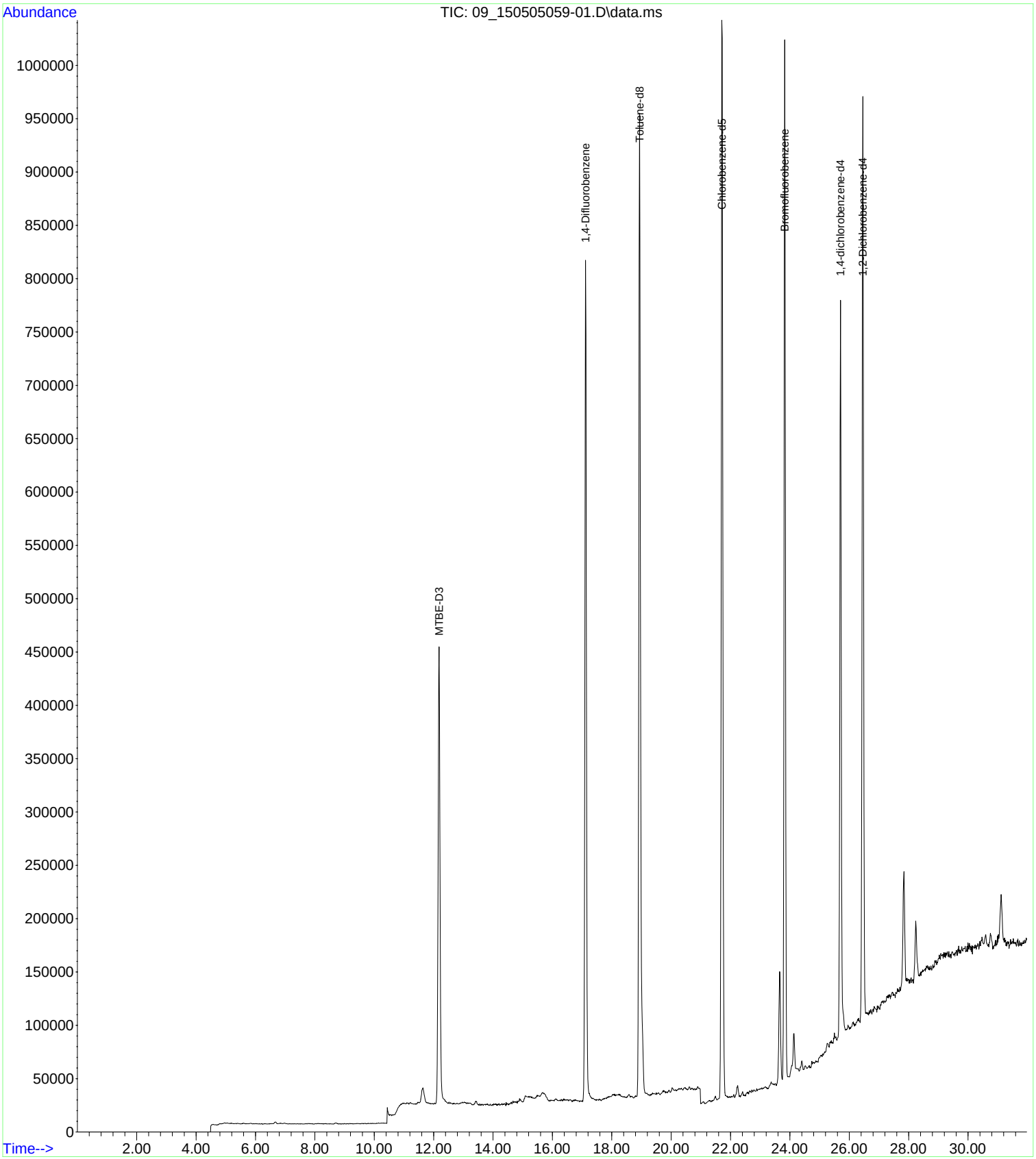
File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\15_150428024-01.D
Operator : SAT
Acquired : 08 May 15 18:08 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 15 150428024-01
Misc Info : 50X DIL DUP
Vial Number: 0



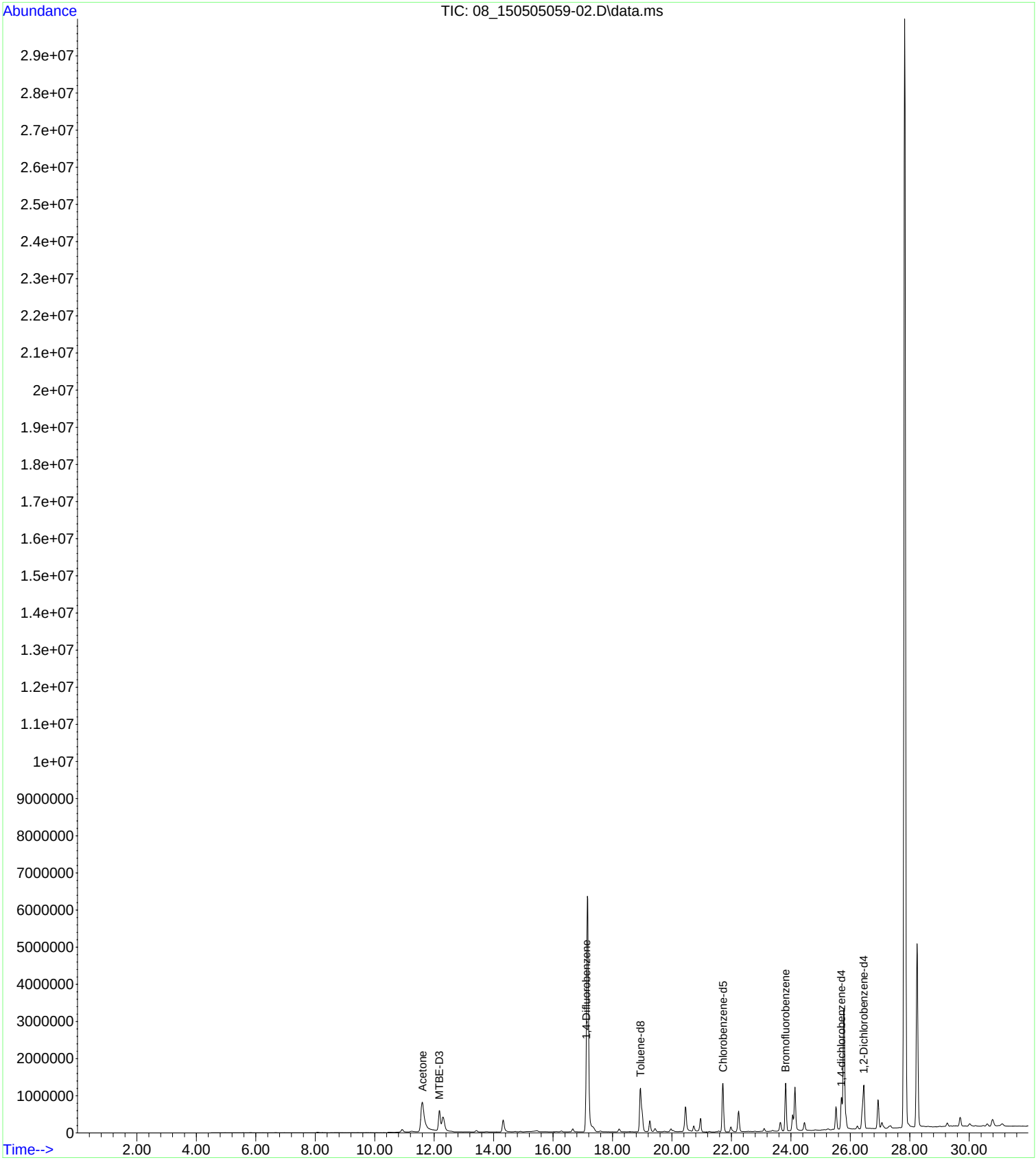
```
File        :T:\Data2\Voc\HP5975\2015 DATA\MAY\04\1401014.D
Operator    : SAT
Acquired    :  4 May 2015   3:12 pm using AcqMethod 8260C.M
Instrument  :   5975 VOC
Sample Name: 150428024-002
Misc Info   : VOC GW TB 040214
Vial Number: 14
```



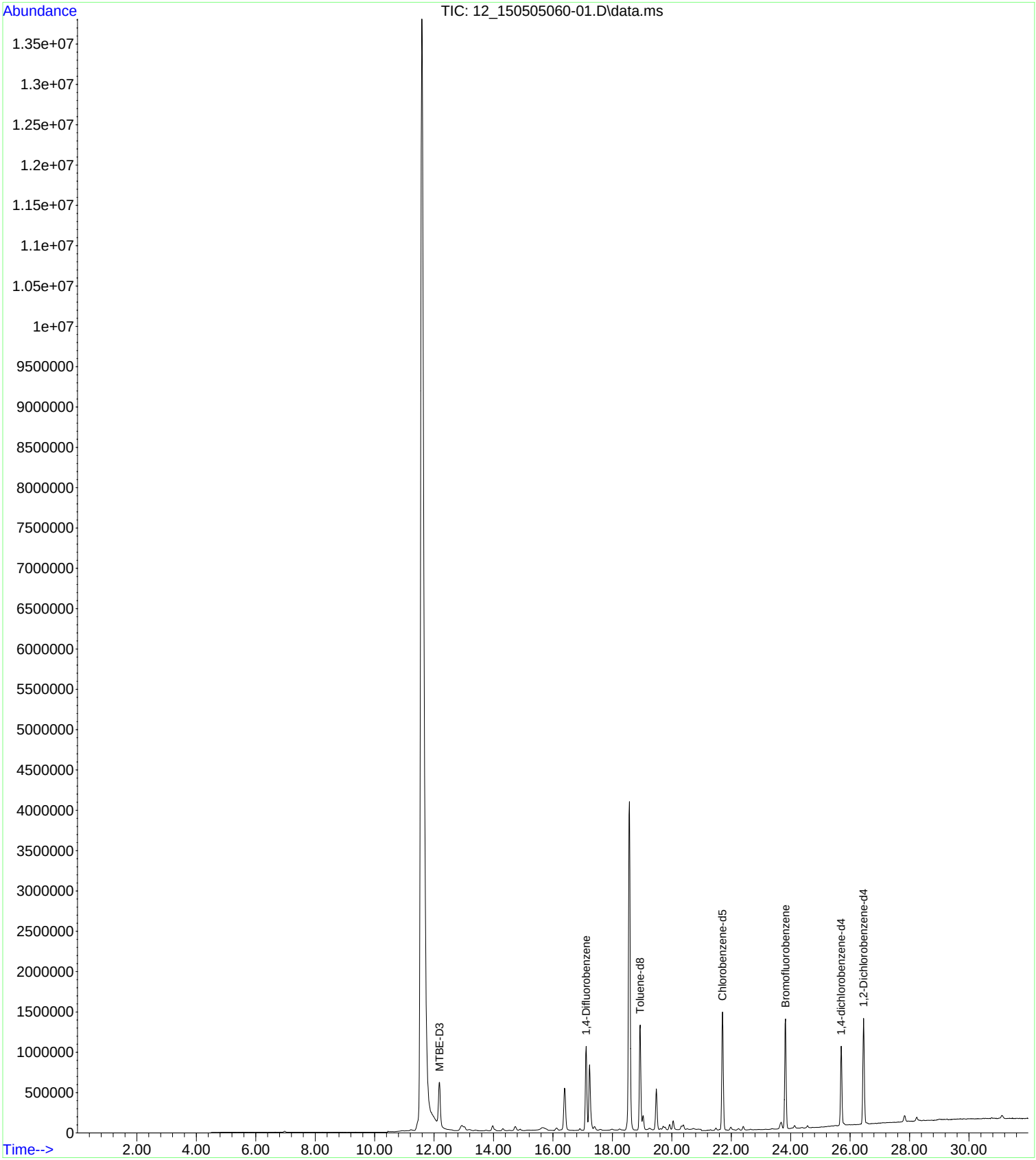
```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\09_150505059-01.D
Operator    : TGT
Acquired    : 07 May 15  16:54 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 09 150505059-01
Misc Info  :
Vial Number: 0
```



File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\08_150505059-02.D
Operator : TGT
Acquired : 07 May 15 16:14 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 08 150505059-02
Misc Info :
Vial Number: 0



File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\12_150505060-01.D
Operator : TGT
Acquired : 07 May 15 18:53 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 12 150505060-01
Misc Info : no dilution
Vial Number: 0



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File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\07_150505060-01.D
Operator    : SAT
Acquired    : 08 May 2015  12:50 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 07 150505060-01
Misc Info   : 100X DIL
Vial Number: 0
```
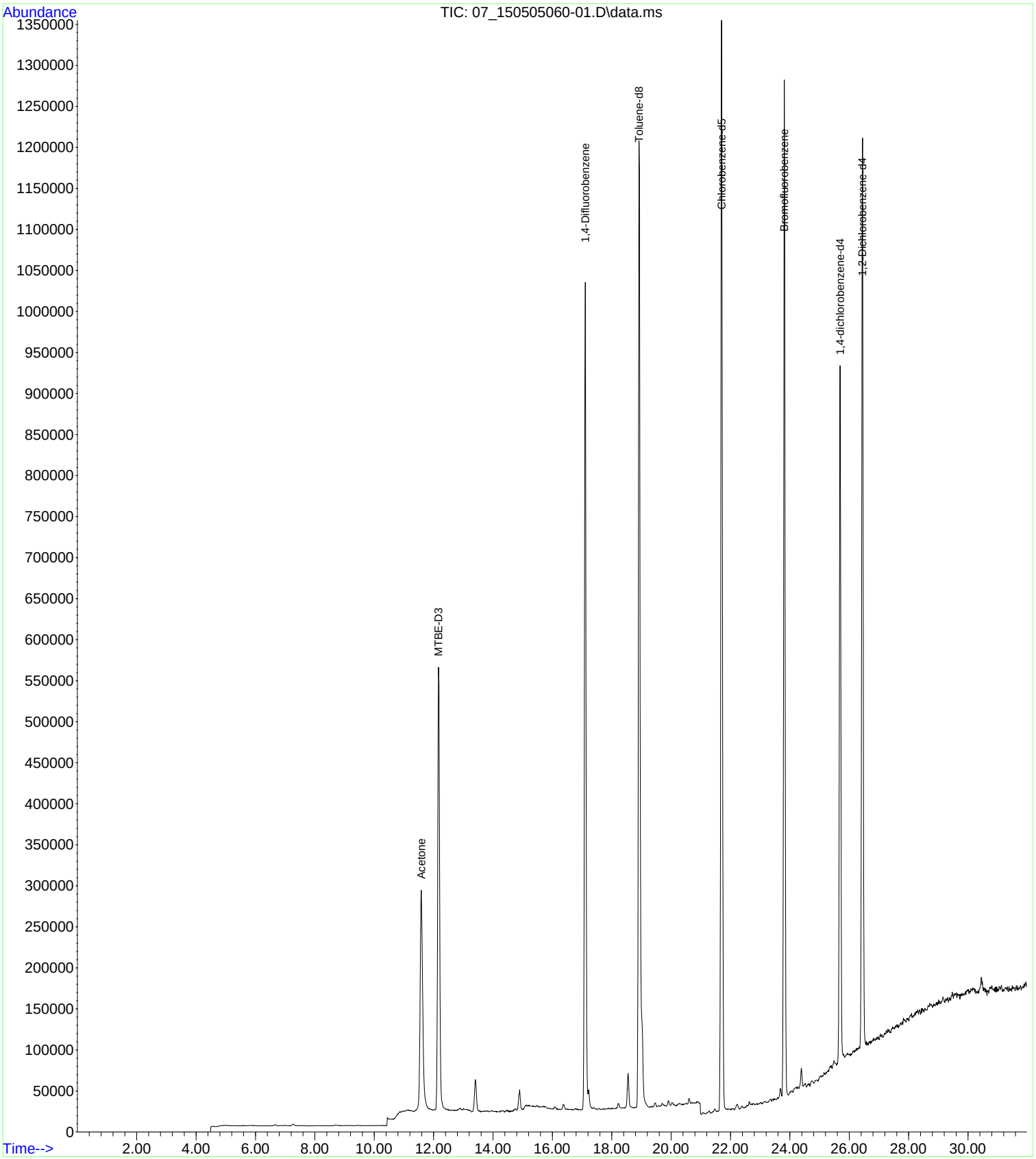
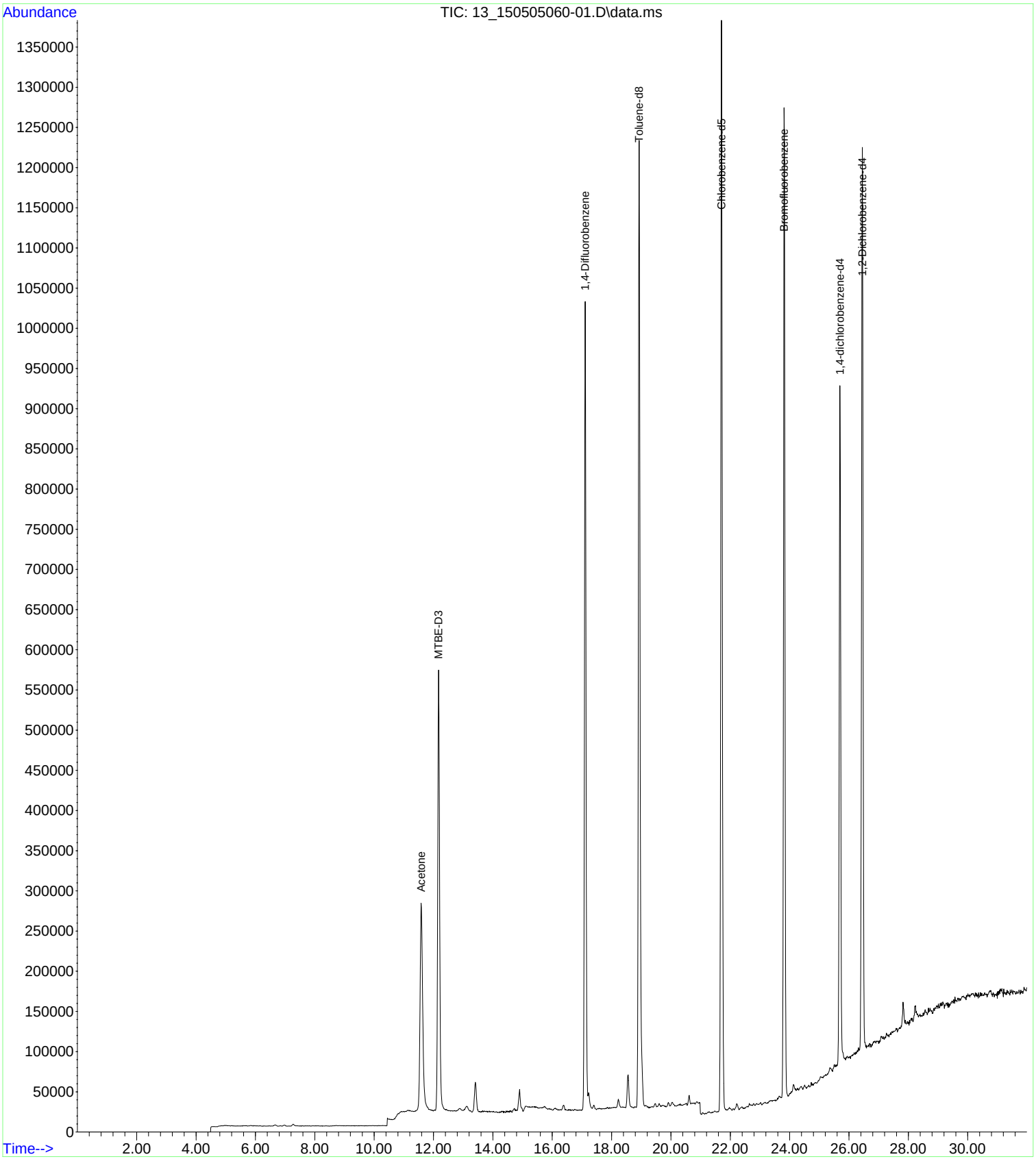
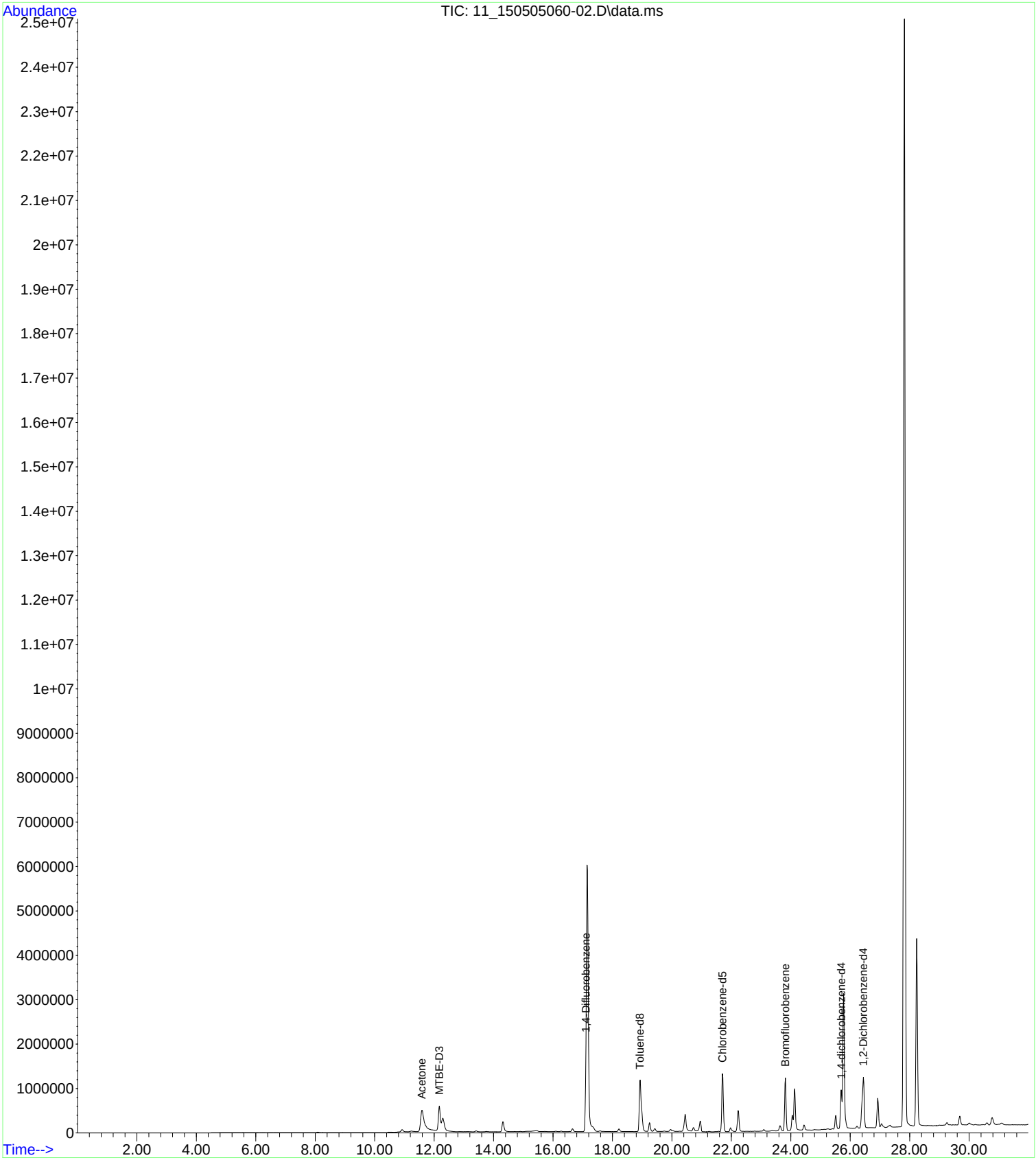



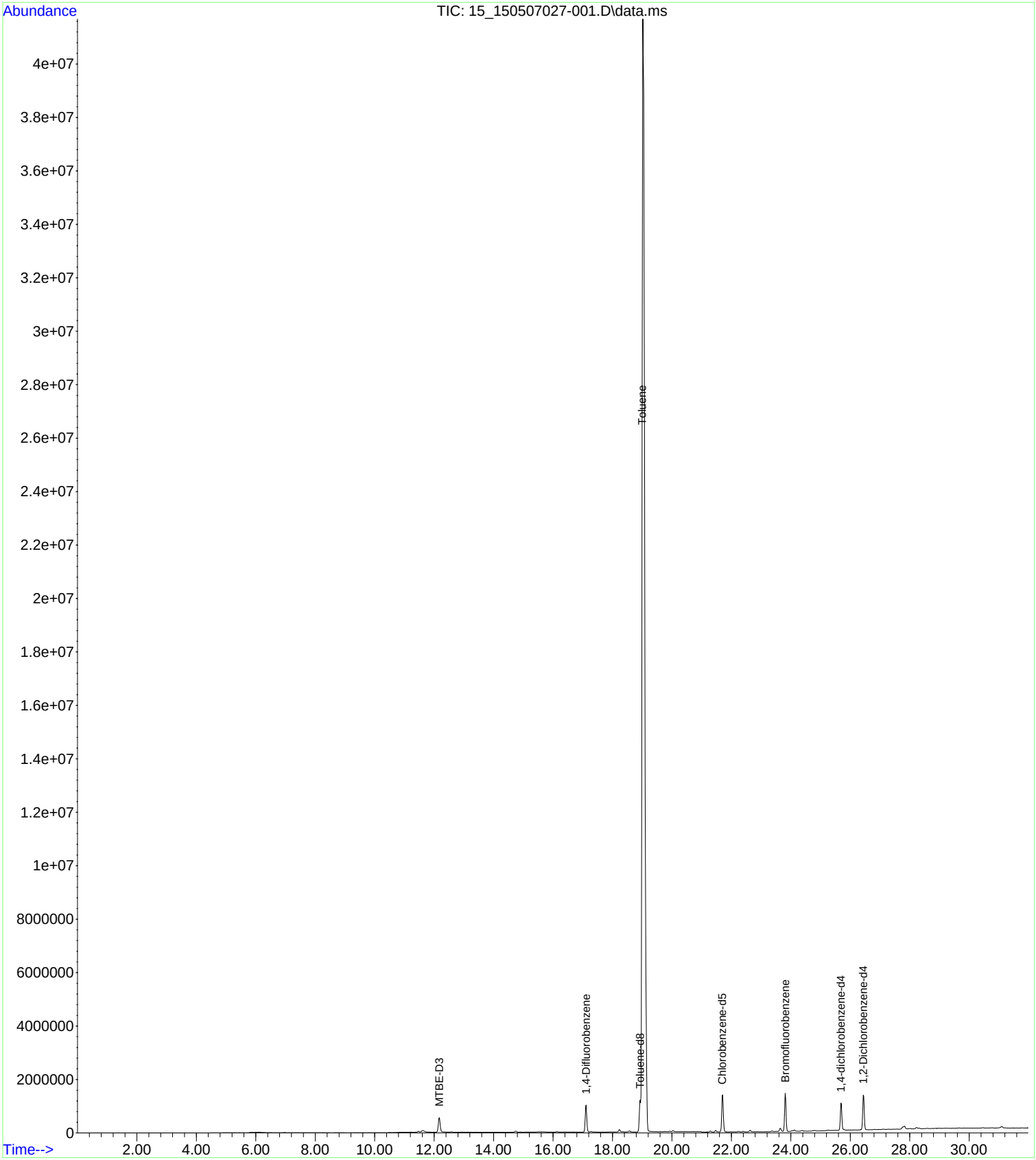
File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\13_150505060-01.D
Operator : SAT
Acquired : 08 May 15 16:48 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 13 150505060-01
Misc Info : 100 X DIL duplicate
Vial Number: 0



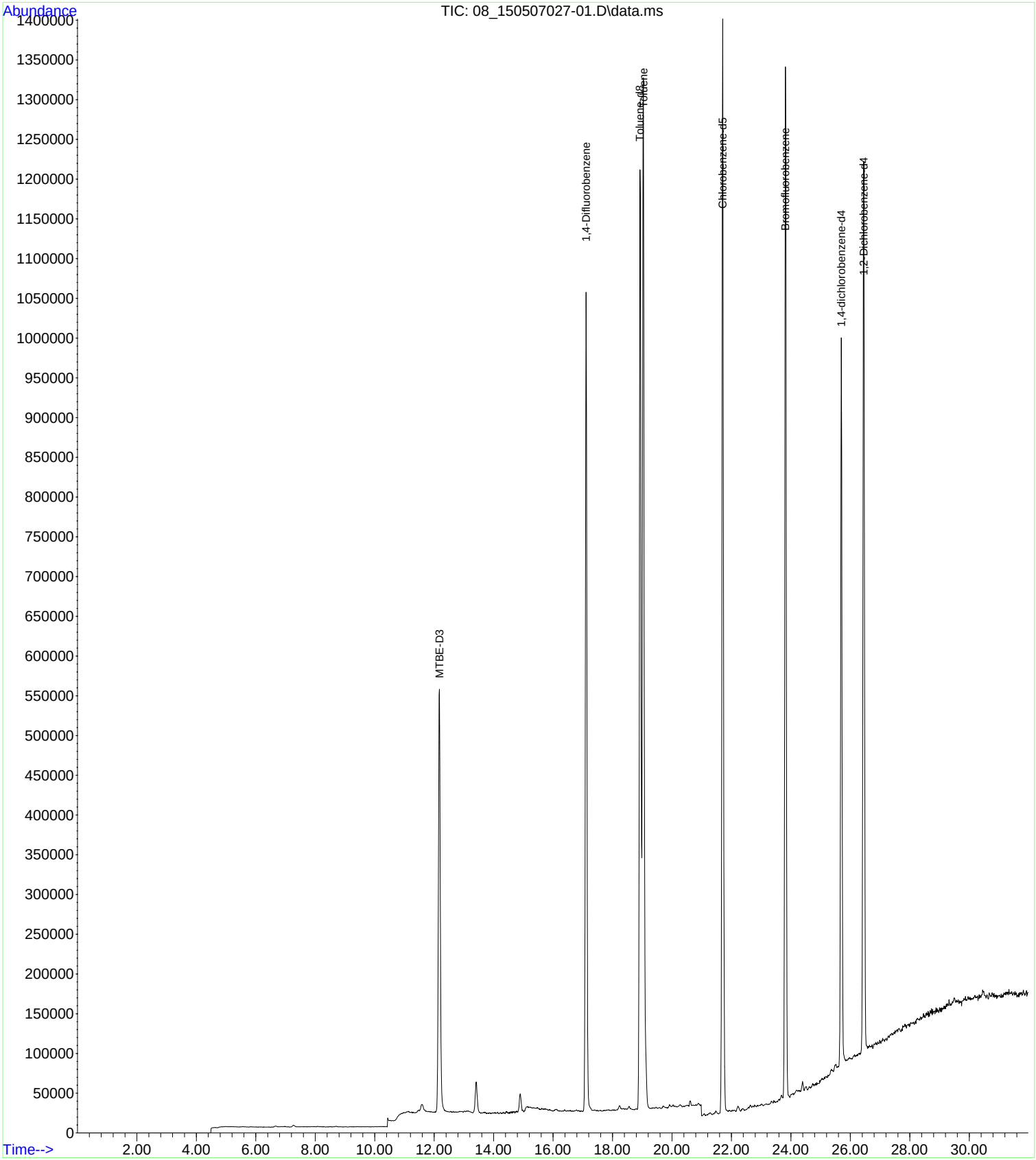
```
File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\11_150505060-02.D
Operator    : TGT
Acquired    : 07 May 15  18:13 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 11 150505060-02
Misc Info  :
Vial Number: 0
```



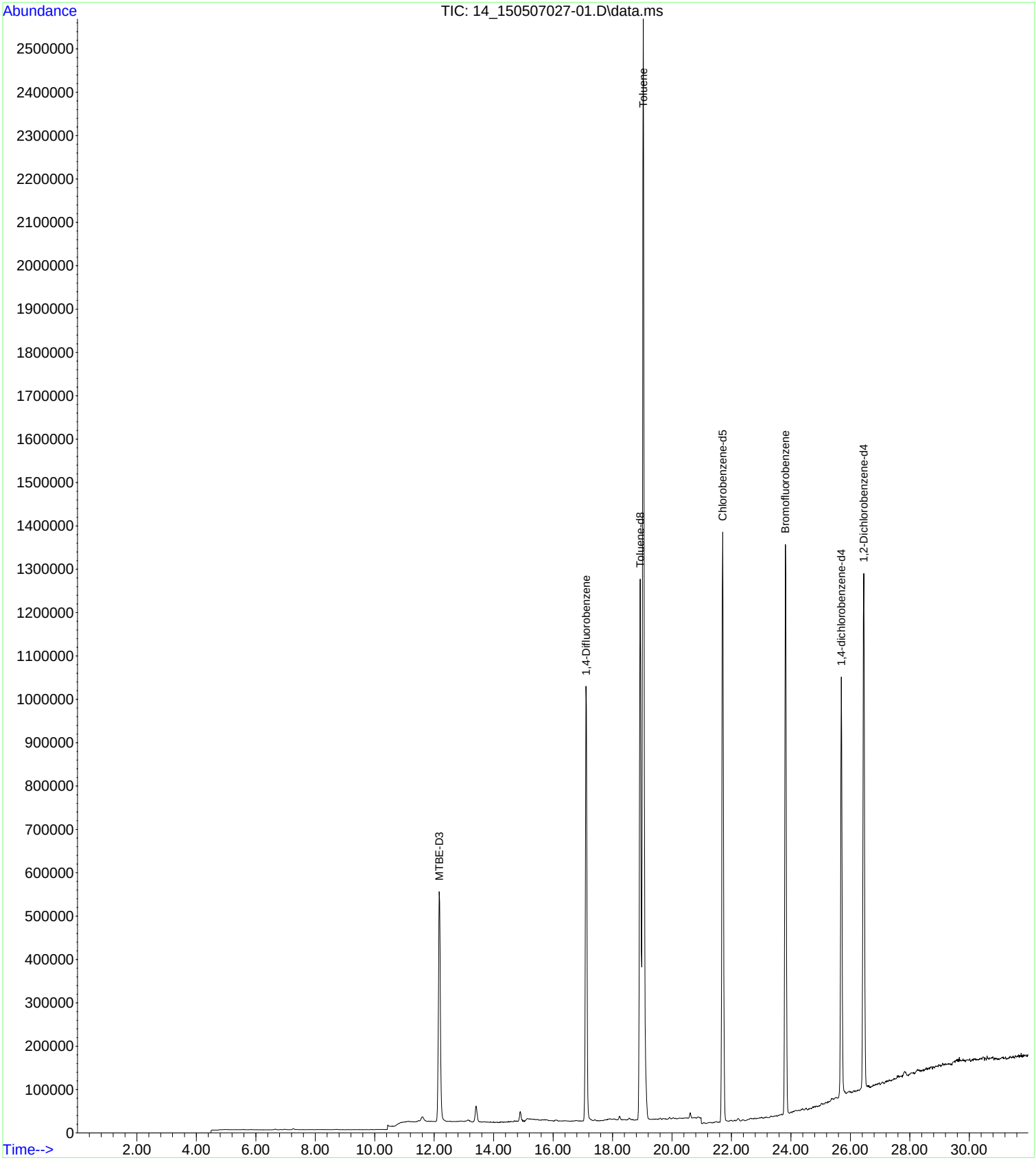
File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\15_150507027-001.D
Operator : TGT
Acquired : 07 May 15 20:52 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 15 150507027-001
Misc Info : no dilution
Vial Number: 0



File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\08_150507027-01.D
Operator : SAT
Acquired : 08 May 15 13:30 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 08 150507027-01
Misc Info : 100X DIL DUP
Vial Number: 0



File :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\08\14_150507027-01.D
Operator : SAT
Acquired : 08 May 15 17:28 using AcqMethod Voc8260.M
Instrument : Saturn 2100
Sample Name: 14 150507027-01
Misc Info : 50X DIL
Vial Number: 0



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File        :T:\Data2\Voc\Saturn2100\2015 DATA\MAY\07\14_150507027-002.D
Operator    : TGT
Acquired    : 07 May 15  20:12 using AcqMethod Voc8260.M
Instrument :   Saturn 2100
Sample Name: 14 150507027-002
Misc Info  :
Vial Number: 0
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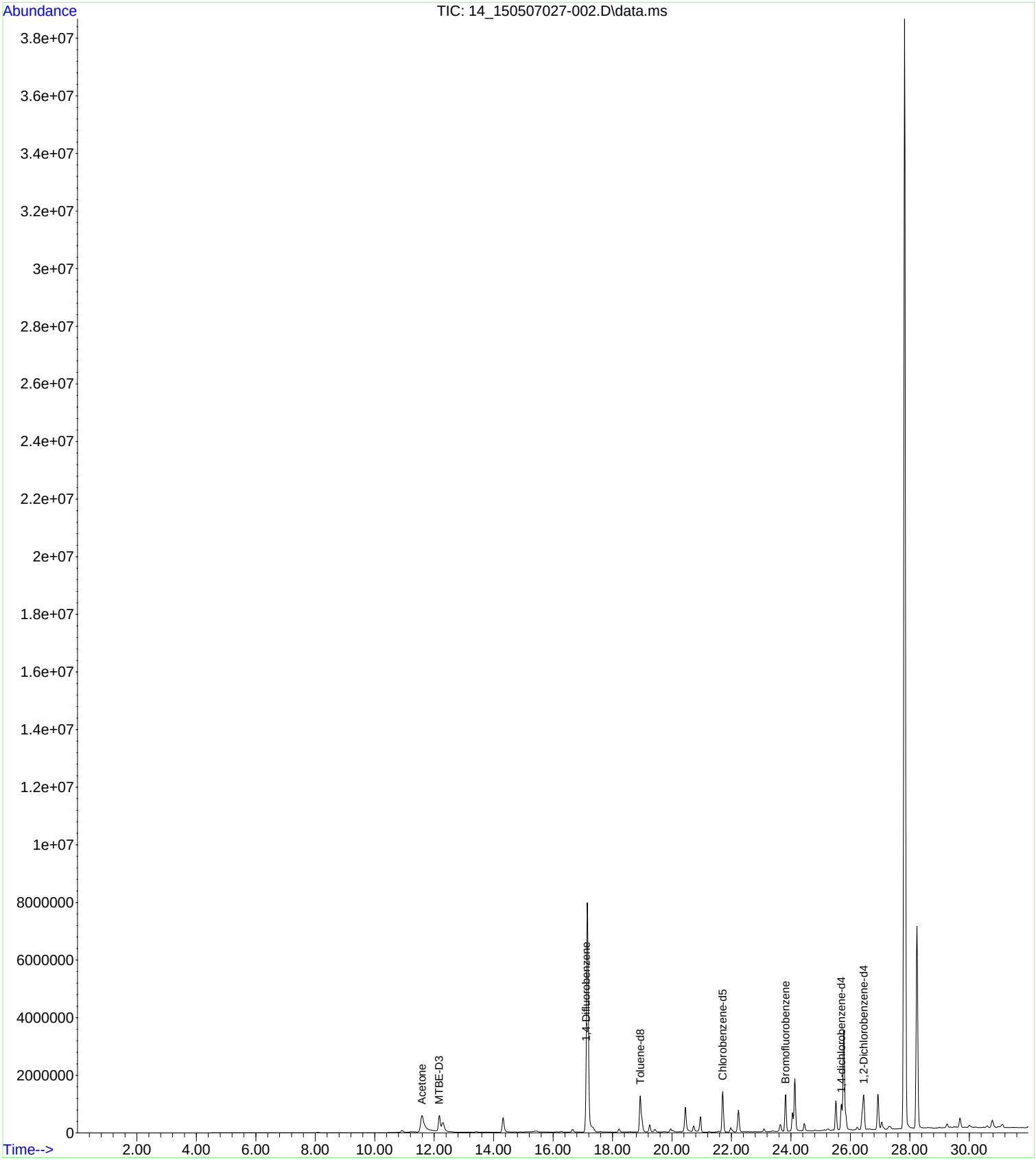

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Sample Number	150428024-001	**Sampling Date**	4/23/2015	**Date/Time Received**	4/28/2015	10:20 AM
Client Sample ID	NSH-014B-042315	**Sampling Time**	2:30 PM	**Extraction Date**	4/28/15	
Matrix	Water	**Sample Location**	W5D0464-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	5/1/2015	BMM	EPA 8270D	

Surrogate Data

Sample Number 150428024-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	51.1	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.77	ug/L	5	95.4	62-139	4/28/2015	5/1/2015
Acenaphthene	4.42	ug/L	5	88.4	70-135	4/28/2015	5/1/2015
Acenaphthylene	4.19	ug/L	5	83.8	67-121	4/28/2015	5/1/2015
Anthracene	4.68	ug/L	5	93.6	63-113	4/28/2015	5/1/2015
Benzo(ghi)perylene	4.13	ug/L	5	82.6	71-141	4/28/2015	5/1/2015
Benzo[a]anthracene	4.61	ug/L	5	92.2	71-142	4/28/2015	5/1/2015
Benzo[a]pyrene	4.11	ug/L	5	82.2	71-143	4/28/2015	5/1/2015
2-Methylnaphthalene	4.83	ug/L	5	96.6	56-128	4/28/2015	5/1/2015
Benzo[k]fluoranthene	4.75	ug/L	5	95.0	69-149	4/28/2015	5/1/2015
Pyrene	4.89	ug/L	5	97.8	69-119	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	4.31	ug/L	5	86.2	68-138	4/28/2015	5/1/2015
Fluoranthene	4.91	ug/L	5	98.2	67-120	4/28/2015	5/1/2015
Fluorene	4.73	ug/L	5	94.6	60-116	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	4.17	ug/L	5	83.4	68-140	4/28/2015	5/1/2015
Naphthalene	3.90	ug/L	5	78.0	51-122	4/28/2015	5/1/2015
Phenanthrene	4.84	ug/L	5	96.8	71-126	4/28/2015	5/1/2015
Benzo[b]fluoranthene	4.66	ug/L	5	93.2	68-148	4/28/2015	5/1/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.54	ug/L	5	90.8	4.9	0-50	4/28/2015	5/1/2015
Acenaphthene	4.22	ug/L	5	84.4	4.6	0-50	4/28/2015	5/1/2015
Acenaphthylene	3.24	ug/L	5	64.8	25.6	0-50	4/28/2015	5/1/2015
Anthracene	4.45	ug/L	5	89.0	5.0	0-50	4/28/2015	5/1/2015
Benzo(ghi)perylene	3.88	ug/L	5	77.6	6.2	0-50	4/28/2015	5/1/2015
Benzo[a]anthracene	4.39	ug/L	5	87.8	4.9	0-50	4/28/2015	5/1/2015
Benzo[a]pyrene	3.40	ug/L	5	68.0	18.9	0-50	4/28/2015	5/1/2015
2-Methylnaphthalene	4.65	ug/L	5	93.0	3.8	0-50	4/28/2015	5/1/2015
Benzo[k]fluoranthene	4.41	ug/L	5	88.2	7.4	0-50	4/28/2015	5/1/2015
Pyrene	4.51	ug/L	5	90.2	8.1	0-50	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	4.19	ug/L	5	83.8	2.8	0-50	4/28/2015	5/1/2015
Fluoranthene	4.68	ug/L	5	93.6	4.8	0-50	4/28/2015	5/1/2015
Fluorene	4.51	ug/L	5	90.2	4.8	0-50	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	4.06	ug/L	5	81.2	2.7	0-50	4/28/2015	5/1/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
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Attn: LAUREN CANDREVA

Batch #: 150428024
Project Name: SVL #W5D0464

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.73	ug/L	5	74.6	4.5	0-50	4/28/2015	5/1/2015
Phenanthrene	4.68	ug/L	5	93.6	3.4	0-50	4/28/2015	5/1/2015
Benzo[b]fluoranthene	4.42	ug/L	5	88.4	5.3	0-50	4/28/2015	5/1/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	4/28/2015	5/1/2015
Acenaphthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Acenaphthylene	ND	ug/L	0.01	4/28/2015	5/1/2015
Anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo(ghi)perylene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[a]anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[a]pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Chrysene	ND	ug/L	0.01	4/28/2015	5/1/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	4/28/2015	5/1/2015
Fluoranthene	ND	ug/L	0.01	4/28/2015	5/1/2015
Fluorene	ND	ug/L	0.01	4/28/2015	5/1/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Naphthalene	ND	ug/L	0.01	4/28/2015	5/1/2015
Phenanthrene	ND	ug/L	0.01	4/28/2015	5/1/2015
Pyrene	ND	ug/L	0.01	4/28/2015	5/1/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150428024
Order Date: 4/28/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5D0464
Comment:

Sample #: 150428024-001 **Customer Sample #:** NSH-014B-042315

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/23/2015
Quantity: 4 **Date Received:** 4/28/2015 10:20:00 AM **Time Collected:** 2:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/8/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/8/2015	***Normal (~10 Days)***

Sample #: 150428024-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/23/2015
Quantity: 1 **Date Received:** 4/28/2015 10:20:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/8/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	4.5
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5D0464

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.8

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley + Aldrich
Contact: Lauren Candreva
Address: 40 E Van Buren St Ste 545
Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyaldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N 44th St Ste 300
Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
* 1	NSH-014B-042315	4/23/15	1430	SN	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals + Silica Sample was field filtered w a 0.45 um disposable groundwater filter capsule w/ HNO_3
2																									
3	Trip Blank					1																X			
4																									UPS Tracking Number
5																									1Z 9X8 989 23 1001 2668
6																									
7																									
8																									
9																									
10																									

Relinquished by: [signature]	Date: 4/23/15	Time: 15:51	Received by: [signature]	Date: 4-24-15	Time: 10:10
Relinquished by: [signature]	Date: 4-24-15	Time: 1319	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

* The pH on the filtered HNO_3 bottle is 7. SVL will preserve to a pH < 2 – mj 4-24-15

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-014B-042315	W5D0464-01	Ground Water	23-Apr-15 14:30	JN	24-Apr-2015	Q3C,Q5

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

Case Narrative

05/08/15 (jk) - C/A balance may be due to large amount of precipitate in the sample.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Client Sample ID: **NSH-014B-042315**
SVL Sample ID: **W5D0464-01 (Ground Water)**

Sampled: 23-Apr-15 14:30
Received: 24-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	**Aluminum**	1.01	mg/L	0.08	0.04		W517257	DT	05/08/15 13:26	
EPA 200.7	**Calcium**	7.00	mg/L	0.040	0.029		W517257	DT	05/08/15 13:26	
EPA 200.7	**Iron**	6.95	mg/L	0.060	0.026		W517257	DT	05/08/15 13:26	
EPA 200.7	**Magnesium**	1.49	mg/L	0.20	0.11		W517257	DT	05/08/15 13:26	
EPA 200.7	**Potassium**	4.05	mg/L	0.50	0.17		W517257	DT	05/08/15 13:26	
EPA 200.7	**Silica (SiO2)**	11.6	mg/L	0.17	0.12		W517257	DT	05/08/15 13:26	
EPA 200.7	**Sodium**	190	mg/L	0.50	0.05		W517257	DT	05/08/15 13:26	
EPA 200.8	**Antimony**	0.00045	mg/L	0.00300	0.00019		W517285	KWH	05/05/15 10:06	J
EPA 200.8	**Arsenic**	0.00606	mg/L	0.00300	0.00027		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Barium**	0.274	mg/L	0.00100	0.000099		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Beryllium**	0.0106	mg/L	0.00020	0.000048		W517285	KWH	05/06/15 07:15	
EPA 200.8	**Boron**	0.217	mg/L	0.0050	0.0012		W517285	KWH	05/06/15 07:15	
EPA 200.8	**Cadmium**	0.00054	mg/L	0.00020	0.000072		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Chromium**	0.0131	mg/L	0.0015	0.0004		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Cobalt**	0.0251	mg/L	0.00100	0.000054		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Copper**	0.369	mg/L	0.00100	0.00015		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Lead**	0.0467	mg/L	0.00300	0.000031		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Manganese**	6.83	mg/L	0.00100	0.000125	5	W517285	KWH	05/05/15 10:20	D2
EPA 200.8	**Molybdenum**	0.0497	mg/L	0.00100	0.00009		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Nickel**	0.0353	mg/L	0.0010	0.0004		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Selenium**	0.0022	mg/L	0.0030	0.0006		W517285	KWH	05/05/15 10:06	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W517285	KWH	05/05/15 10:06	U
EPA 200.8	**Thallium**	0.000259	mg/L	0.00100	0.000026		W517285	KWH	05/05/15 10:06	J
EPA 200.8	**Uranium**	0.0181	mg/L	0.00100	0.000014		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Vanadium**	0.0299	mg/L	0.0030	0.0009		W517285	KWH	05/05/15 10:06	
EPA 200.8	**Zinc**	4.36	mg/L	0.0200	0.0050	5	W517285	KWH	05/05/15 10:20	D2
Metals (Filtered)										
EPA 245.1	**Mercury**	0.00006	mg/L	0.00020	0.00004		W518252	STA	05/05/15 14:42	J
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	596	mg/L as CaCO3	1.0			W518100	DKS	05/01/15 11:05	Q19
SM 2320B	**Bicarbonate**	527	mg/L as CaCO3	1.0			W518100	DKS	05/01/15 11:05	Q19
SM 2320B	**Carbonate**	69.3	mg/L as CaCO3	1.0			W518100	DKS	05/01/15 11:05	Q19
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W518100	DKS	05/01/15 11:05	U,Q19
SM 2510 B	**Specific conductance**	812	µmhos/cm	5.00			W517344	JDM	04/27/15 15:40	
SM 2540 C	**Total Diss. Solids**	2320	mg/L	100			W517340	JDM	04/27/15 18:15	N3,Q18
SM 4500 H B	**pH @23.0°C**	9.24	pH Units				W518100	DKS	05/01/15 11:05	H5,Q19
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W518090	VRH	04/28/15 14:06	U
SM 4500-P-E	**Orthophosphate as P**	0.286	mg/L	0.050	0.029	5	W517323	MCB	04/24/15 12:36	D1,E12,Q14
SM 4500-S-F	**Sulfide**	6.92	mg/L	4.00	1.08	4	W518041	SM	04/27/15 16:45	D1,E12
SM 5310B	**Total Organic Carbon**	51.9	mg/L	1.00	0.24		W518240	SM	05/04/15 20:18	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Client Sample ID: **NSH-014B-042315**
SVL Sample ID: **W5D0464-01 (Ground Water)**

Sampled: 23-Apr-15 14:30
Received: 24-Apr-15
Sampled By: JN

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	35.5	mg/L	2.00	0.56	10	W517196	MCE	04/24/15 13:44	D2
EPA 300.0	**Fluoride**	4.71	mg/L	1.00	0.220	10	W517196	MCE	04/24/15 13:44	D1
EPA 300.0	**Nitrate as N**	0.454	mg/L	0.500	0.080	10	W517196	MCE	04/24/15 13:44	D1,J
EPA 300.0	Nitrite as N	< 0.140	mg/L	0.500	0.140	10	W517196	MCE	04/24/15 13:44	D1,U
EPA 300.0	**Sulfate as SO4**	82.4	mg/L	3.00	0.50	10	W517196	MCE	04/24/15 13:44	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 9.60 meq/L Anion Sum: 14.9 meq/L C/A Balance: -21.73 % Calculated TDS: 697 TDS/cTDS: 3.33 TDS/eC: 2.86

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W517257	08-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.040	W517257	08-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W517257	08-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W517257	08-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W517257	08-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W517257	08-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W517257	08-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W517285	05-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W517285	05-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W517285	05-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W517285	06-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W517285	06-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W517285	05-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W517285	05-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W517285	05-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W517285	05-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W517285	05-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W517285	06-May-15	U
EPA 200.8	Molybdenum	mg/L	0.00009	0.00009	0.00100	W517285	05-May-15	J
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W517285	05-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W517285	05-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W517285	05-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W517285	05-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W517285	05-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W517285	05-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W517285	05-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W518252	05-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.40		1.0	W518100	01-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.40		1.0	W518100	01-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W518100	01-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W518100	01-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W517340	27-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W518090	28-Apr-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W517323	24-Apr-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W518041	27-Apr-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W518240	04-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W517196	24-Apr-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W517196	24-Apr-15	U
EPA 300.0	Nitrate as N	mg/L	0.013	0.008	0.050	W517196	24-Apr-15	J
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W517196	24-Apr-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W517196	24-Apr-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.95	1.00	95.2	85 - 115	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	18.8	20.0	93.9	85 - 115	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.40	10.0	94.0	85 - 115	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	18.7	20.0	93.5	85 - 115	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	19.9	20.0	99.7	85 - 115	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.5	10.7	97.9	85 - 115	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	17.9	19.0	94.0	85 - 115	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0258	0.0250	103	85 - 115	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0260	0.0250	104	85 - 115	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0264	0.0250	106	85 - 115	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0258	0.0250	103	85 - 115	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.0250	0.0250	99.8	85 - 115	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0260	0.0250	104	85 - 115	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0245	0.0250	97.8	85 - 115	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0245	0.0250	97.9	85 - 115	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0240	0.0250	96.0	85 - 115	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0263	0.0250	105	85 - 115	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0251	0.0250	100	85 - 115	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.0251	0.0250	100	85 - 115	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0242	0.0250	96.8	85 - 115	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0266	0.0250	106	85 - 115	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0258	0.0250	103	85 - 115	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0262	0.0250	105	85 - 115	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0254	0.0250	102	85 - 115	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0249	0.0250	99.7	85 - 115	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.0253	0.0250	101	85 - 115	W517285	05-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00503	0.00500	101	85 - 115	W518252	05-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	99.4	99.3	100	85 - 115	W518100	01-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	99.4	99.3	100	85 - 115	W518100	01-May-15	
SM 2510 B	Specific conductance	µmhos/cm	314	306	103	90 - 110	W517344	27-Apr-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.161	0.150	107	90 - 110	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.815	0.786	104	90 - 110	W517323	24-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.29	2.50	91.7	80 - 120	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	32.4	34.3	94.6	90 - 110	W518240	04-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	3.03	3.00	101	90 - 110	W517196	24-Apr-15	
EPA 300.0	Fluoride	mg/L	1.96	2.00	98.1	90 - 110	W517196	24-Apr-15	
EPA 300.0	Nitrate as N	mg/L	1.96	2.01	97.3	90 - 110	W517196	24-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.56	2.51	102	90 - 110	W517196	24-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.68	10.0	96.8	90 - 110	W517196	24-Apr-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	204	206	0.7	20	W518100	01-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	204	206	0.7	20	W518100	01-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W518100	01-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W518100	01-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	767	812	5.8	20	W517344	27-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	314	305	2.9	10	W517340	27-Apr-15	
SM 2540 C	Total Diss. Solids	mg/L	572	598	4.4	10	W517340	27-Apr-15	
SM 4500 H B	pH	pH Units	8.21	8.16	0.6	20	W518100	01-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.14	0.18	1.00	96.3	70 - 130	W517257	08-May-15	
EPA 200.7	Aluminum	mg/L	2.33	1.39	1.00	93.4	70 - 130	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	44.9	26.5	20.0	92.1	70 - 130	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	44.7	26.0	20.0	93.5	70 - 130	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.54	0.150	10.0	93.9	70 - 130	W517257	08-May-15	
EPA 200.7	Iron	mg/L	41.5	32.7	10.0	87.7	70 - 130	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	34.5	15.8	20.0	93.5	70 - 130	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	20.5	1.18	20.0	96.8	70 - 130	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	22.3	2.35	20.0	99.8	70 - 130	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	21.1	0.28	20.0	104	70 - 130	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.0	48.1	10.7	103	70 - 130	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	14.2	3.62	10.7	98.9	70 - 130	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	67.1	48.9	19.0	95.9	70 - 130	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	18.7	0.06	19.0	98.0	70 - 130	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0247	0.00022	0.0250	98.0	70 - 130	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0283	0.00173	0.0250	106	70 - 130	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0418	0.0150	0.0250	107	70 - 130	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0254	0.00063	0.0250	99.1	70 - 130	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.0943	0.0720	0.0250	89.5	70 - 130	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0260	0.00044	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0248	0.0010	0.0250	95.1	70 - 130	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0238	0.00008	0.0250	95.1	70 - 130	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0588	0.0342	0.0250	98.4	70 - 130	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0260	0.00079	0.0250	101	70 - 130	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0472	0.0231	0.0250	96.4	70 - 130	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.402	0.372	0.0250	122	70 - 130	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0235	0.0005	0.0250	91.9	70 - 130	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0301	0.0012	0.0250	116	70 - 130	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0243	0.000055	0.0250	97.0	70 - 130	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0256	<0.000026	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0435	0.0180	0.0250	102	70 - 130	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0030	0.0250	99.9	70 - 130	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.560	0.520	0.0250	R > 4S	70 - 130	W517285	05-May-15	M3
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00101	<0.00004	0.00100	101	70 - 130	W518252	05-May-15	
EPA 245.1	Mercury	mg/L	0.00101	<0.00004	0.00100	101	70 - 130	W518252	05-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	<0.0025	0.100	111	75 - 125	W518090	28-Apr-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.497	<0.0058	0.500	99.3	75 - 125	W517323	24-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.41	<0.39	2.50	96.6	80 - 120	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	52.1	1.00	50.0	102	80 - 120	W518240	04-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	3.00	<0.056	3.00	100	90 - 110	W517196	24-Apr-15	
EPA 300.0	Fluoride	mg/L	2.00	<0.022	2.00	99.9	90 - 110	W517196	24-Apr-15	
EPA 300.0	Nitrate as N	mg/L	2.08	0.092	2.00	99.3	90 - 110	W517196	24-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.05	0.032	2.00	101	90 - 110	W517196	24-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	9.98	<0.05	10.0	99.8	90 - 110	W517196	24-Apr-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.14	1.14	1.00	96.5	0.2	20	W517257	08-May-15	
EPA 200.7	Calcium	mg/L	45.3	44.9	20.0	93.9	0.8	20	W517257	08-May-15	
EPA 200.7	Iron	mg/L	9.58	9.54	10.0	94.3	0.4	20	W517257	08-May-15	
EPA 200.7	Magnesium	mg/L	34.8	34.5	20.0	95.2	1.0	20	W517257	08-May-15	
EPA 200.7	Potassium	mg/L	22.5	22.3	20.0	101	0.8	20	W517257	08-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.4	59.0	10.7	106	0.5	20	W517257	08-May-15	
EPA 200.7	Sodium	mg/L	67.5	67.1	19.0	98.2	0.7	20	W517257	08-May-15	
EPA 200.8	Antimony	mg/L	0.0256	0.0247	0.0250	102	3.6	20	W517285	05-May-15	
EPA 200.8	Arsenic	mg/L	0.0289	0.0283	0.0250	109	2.2	20	W517285	05-May-15	
EPA 200.8	Barium	mg/L	0.0420	0.0418	0.0250	108	0.7	20	W517285	05-May-15	
EPA 200.8	Beryllium	mg/L	0.0281	0.0254	0.0250	110	10.1	20	W517285	06-May-15	
EPA 200.8	Boron	mg/L	0.102	0.0943	0.0250	119	7.5	20	W517285	06-May-15	
EPA 200.8	Cadmium	mg/L	0.0265	0.0260	0.0250	104	1.8	20	W517285	05-May-15	
EPA 200.8	Chromium	mg/L	0.0254	0.0248	0.0250	97.9	2.8	20	W517285	05-May-15	
EPA 200.8	Cobalt	mg/L	0.0244	0.0238	0.0250	97.2	2.2	20	W517285	05-May-15	
EPA 200.8	Copper	mg/L	0.0593	0.0588	0.0250	100	0.8	20	W517285	05-May-15	
EPA 200.8	Lead	mg/L	0.0264	0.0260	0.0250	103	1.5	20	W517285	05-May-15	
EPA 200.8	Manganese	mg/L	0.0503	0.0472	0.0250	109	6.3	20	W517285	06-May-15	
EPA 200.8	Molybdenum	mg/L	0.404	0.402	0.0250	127	0.3	20	W517285	05-May-15	
EPA 200.8	Nickel	mg/L	0.0240	0.0235	0.0250	93.9	2.1	20	W517285	05-May-15	
EPA 200.8	Selenium	mg/L	0.0309	0.0301	0.0250	119	2.5	20	W517285	05-May-15	
EPA 200.8	Silver	mg/L	0.0247	0.0243	0.0250	98.6	1.6	20	W517285	05-May-15	
EPA 200.8	Thallium	mg/L	0.0258	0.0256	0.0250	103	0.9	20	W517285	05-May-15	
EPA 200.8	Uranium	mg/L	0.0436	0.0435	0.0250	102	0.3	20	W517285	05-May-15	
EPA 200.8	Vanadium	mg/L	0.0287	0.0280	0.0250	103	2.6	20	W517285	05-May-15	
EPA 200.8	Zinc	mg/L	0.561	0.560	0.0250	R > 4S	0.3	20	W517285	05-May-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00101	0.00101	0.00100	101	0.0	20	W518252	05-May-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.111	0.111	0.100	111	0.0	20	W518090	28-Apr-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.505	0.497	0.500	101	1.6	20	W517323	24-Apr-15	
SM 4500-S-F	Sulfide	mg/L	2.45	2.41	2.50	98.2	1.7	20	W518041	27-Apr-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	52.1	50.0	100	2.2	20	W518240	04-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5D0464**
Reported: 08-May-15 15:51

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	3.07	3.00	3.00	102	2.2	20	W517196	24-Apr-15	
EPA 300.0	Fluoride	mg/L	2.04	2.00	2.00	102	2.3	20	W517196	24-Apr-15	
EPA 300.0	Nitrate as N	mg/L	2.11	2.08	2.00	101	1.5	20	W517196	24-Apr-15	
EPA 300.0	Nitrite as N	mg/L	2.09	2.05	2.00	103	1.9	20	W517196	24-Apr-15	
EPA 300.0	Sulfate as SO4	mg/L	10.2	9.98	10.0	102	1.7	20	W517196	24-Apr-15	

Notes and Definitions

D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
E12	The reported value is estimated due to the presence of interferents.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
N3	Due to high sediment content, TDS result should be considered estimated.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
Q18	Sample is high in particulates/sediment and slow to filter. Initial volume was reduced.
Q19	Sample is high in sediment. Sample was homogenized, an aliquot was poured off and allowed to settle, then the water portion was decanted and analyzed.
Q3C	SVL filtered and preserved samples.
Q5	Sample was received with inadequate preservation, but preserved by the laboratory.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Monday, June 08, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505193
Project Name:
Project Number: 5E0047

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/11/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505193

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505193
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0047
Client PO Number: 15285

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-011-043015	1505193-1		WATER	30-Apr-15	11:10

ALS

1505193

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #
TEMP on Receipt: SE0047

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15285

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Date	Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross α/β 900.0	RAD 226/228 903.1/904	U 234/235/238	ASTM D3972	Rush Instructions (Days)	Comments
(1) 1	NSH-011-043015	4/30/15	1110	CG	2	3			X					X	X	X			Call Chris Meyer with Questions
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jacobson	5-5-15	1247	Scott Malley	05-11-15	0945

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SUL Workorder No: 1505193

Project Manager: JRK Initials: SDM Date: 05-11-15

1.	Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2.	Are custody seals on shipping containers intact?	NONE	(YES)	NO
3.	Are Custody seals on sample containers intact?	(NONE)	YES	NO
4.	Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5.	Are the COC and bottle labels complete and legible?		(YES)	NO
6.	Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7.	Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8.	Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9.	Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10.	Is there sufficient sample for the requested analyses?		(YES)	NO
11.	Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12.	Are all samples within holding times for the requested analyses?		(YES)	NO
13.	Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	(N/A)	YES	NO
15.	Do any water samples contain sediment? Amount of sediment: ____ dusting X moderate ____ heavy	N/A	(YES)	NO
16.	Were the samples shipped on ice?		YES	(NO)
17.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

* Sample 1 (NSH-OB-050415) all three bottles have a moderate amount of sediment.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-11-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

20 LBS

1 OF 1

DWT: 14,12,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

13
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4402 3522

BILLING: P/P

1505193

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported [illegible] Regulations. Diversion contrary to law is prohibited.

Client: SVL Analytical
Date: *08-Jun-15*
Project: 5E0047
Work Order: 1505193
Sample ID: NSH-011-043015
Lab ID: 1505193-1
Legal Location:
Matrix: WATER
Collection Date: 4/30/2015 11:10
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **6/1/2015**	PrepBy: **DKL**
GROSS ALPHA	**12.8 (+/- 2.8)**		**2.1**	**pCi/l**	NA	6/3/2015 15:29
GROSS BETA	**17.6 (+/- 3.6)**		**3.4**	**pCi/l**	NA	6/3/2015 15:29
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **6/2/2015**	PrepBy: **CAS**
Tracer: U-232	*65.9*		*30-110*	*%REC*	DL = NA	6/5/2015 14:33
U-234	**1.95 (+/- 0.36)**		**0.05**	**pCi/l**	NA	6/5/2015 14:33
U-235	ND (+/- 0.043)	U	0.068	pCi/l	NA	6/5/2015 14:33
U-238	**0.97 (+/- 0.2)**		**0.06**	**pCi/l**	NA	6/5/2015 14:33
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/19/2015**	PrepBy: **PJW**
Ra-226	0.23 (+/- 0.13)	LT	0.04	pCi/l	NA	5/26/2015 13:56
Carr: BARIUM	*87.9*		*40-110*	*%REC*	DL = NA	5/26/2015 13:56
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **5/14/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.34)	U	0.66	pCi/l	NA	5/19/2015 09:03
Carr: BARIUM	*87.9*		*40-110*	*%REC*	DL = NA	5/19/2015 09:03

Client:	SVL Analytical	**Date:**	*08-Jun-15*
Project:	5E0047	**Work Order:**	1505193
Sample ID:	NSH-011-043015	**Lab ID:**	1505193-1
Legal Location:		**Matrix:**	WATER
Collection Date:	4/30/2015 11:10	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505193
Project: 5E0047

Date: *6/8/2015 1:36:4*

QC BATCH REPORT

Batch ID: **RE150519-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.4 (+/- 7.4)	0.3	30.71		95.6	67-120					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	28.4 (+/- 7.2)	0.4	30.71		92.4	67-120		29.4	0.09	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.182									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505193-1

Client: SVL Analytical
Work Order: 1505193
Project: 5E0047

QC BATCH REPORT

Batch ID: **AS150602-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.94 (+/- 0.88)	0.05	4.416		112	82-122					P
U-238	4.62 (+/- 0.82)	0.04	4.585		101	78-126					P
Tracer: U-232	3.5	0.06	4.165		84.1	30-110					

LCSD Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	5.05 (+/- 0.9)	0.07	4.416		114	82-122		4.94	0.09	2.1	P
U-238	4.86 (+/- 0.87)	0.04	4.585		106	78-126		4.62	0.2	2.1	P
Tracer: U-232	3.25	0.08	4.165		78.1	30-110		3.5			

MB Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/6/2015 11:24**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.02									U
U-235	ND	0.027									U
U-238	ND	0.03									U
Tracer: U-232	2.96	0.03	4.164		71.1	30-110					

The following samples were analyzed in this batch: 1505193-1

Client: SVL Analytical
Work Order: 1505193
Project: 5E0047

QC BATCH REPORT

Batch ID: **AB150601-2-4** Instrument ID **LB4100-A** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 09:31**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	191 (+/- 32)	3	224.2		85.3	70-130					P
GROSS BETA	204 (+/- 33)	5	203.6		100	70-130					P,M3

MB Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 15:29**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.64									U
GROSS BETA	ND	1.05									U

The following samples were analyzed in this batch: 1505193-1 1505233-2

Client: SVL Analytical
Work Order: 1505193
Project: 5E0047

QC BATCH REPORT

Batch ID: **RA150514-1-2** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.3 (+/- 2)	0.5	7.779		106	70-130					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8 (+/- 1.9)	0.5	7.779		103	70-130		8.3	0.1	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.46									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505193-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	12.5	5/7/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Acetone	2250	ug/L	0.5	12.5	5/7/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	2.5	5/7/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150505060-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	101.2	70-130
Bromofluorobenzene	EPA 524.3	98.6	70-130
Toluene-d8	EPA 524.3	94.2	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001A	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015 DUPLICATE	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Acetone	2220	ug/L	0.5	50	5/13/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001A	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015 DUPLICATE	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001A	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015 DUPLICATE	**Sampling Time**	11:10 AM			
Matrix	Water	**Sample Location**	W5E0047-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150505060-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	94.4	70-130
Bromofluorobenzene	EPA 524.3	91.2	70-130
Toluene-d8	EPA 524.3	96.2	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-002	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0047-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Acetone	47.1	ug/L	0.5	2.5	5/8/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-002	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0047-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-002	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0047-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	5/8/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150505060-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.0	70-130
Bromofluorobenzene	EPA 524.3	90.8	70-130
Toluene-d8	EPA 524.3	98.8	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
Toluene	9.82	ug/L	10	98.2	70-130	5/7/2015	5/7/2015
Tetrachloroethene	10.3	ug/L	10	103.0	70-130	5/7/2015	5/7/2015
Ethylbenzene	9.96	ug/L	10	99.6	70-130	5/7/2015	5/7/2015
Chlorobenzene	9.63	ug/L	10	96.3	70-130	5/7/2015	5/7/2015
Benzene	9.85	ug/L	10	98.5	70-130	5/7/2015	5/7/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150501011-001	Trichloroethene	ND	9.42	ug/L	10	94.2	70-130	5/7/2015	5/7/2015
150501011-001	Toluene	ND	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
150501011-001	Tetrachloroethene	ND	7.62	ug/L	10	76.2	70-130	5/7/2015	5/7/2015
150501011-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-130	5/7/2015	5/7/2015
150501011-001	Chlorobenzene	ND	9.52	ug/L	10	95.2	70-130	5/7/2015	5/7/2015
150501011-001	Benzene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015
150501011-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.07	ug/L	10	90.7	3.8	0-30	5/7/2015	5/7/2015
Toluene	10.4	ug/L	10	104.0	3.8	0-30	5/7/2015	5/7/2015
Tetrachloroethene	7.56	ug/L	10	75.6	0.8	0-30	5/7/2015	5/7/2015
Ethylbenzene	10.3	ug/L	10	103.0	1.0	0-30	5/7/2015	5/7/2015
Chlorobenzene	9.68	ug/L	10	96.8	1.7	0-30	5/7/2015	5/7/2015
Benzene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-dichloropropene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
2-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
4-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Benzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromodichloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromoform	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Chlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroform	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Ethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Hexachlorobutadiene	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Methylene chloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Naphthalene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Propylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
p-isopropyltoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
sec-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Styrene	ND	ug/L	0.5	5/7/2015	5/7/2015
tert-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Tetrachloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Toluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Total Xylene	ND	ug/L	0.5	5/7/2015	5/7/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Vinyl Chloride	ND	ug/L	0.5	5/7/2015	5/7/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Sample Number	150505060-001	**Sampling Date**	4/30/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	NSH-011-043015	**Sampling Time**	11:10 AM	**Extraction Date**	5/7/2015	
Matrix	Water	**Sample Location**	W5E0047-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	

Surrogate Data

Sample Number 150505060-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	62.0	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.66	ug/L	5	93.2	62-139	5/7/2015	5/13/2015
Acenaphthene	4.41	ug/L	5	88.2	70-135	5/7/2015	5/13/2015
Acenaphthylene	4.28	ug/L	5	85.6	67-121	5/7/2015	5/13/2015
Anthracene	4.69	ug/L	5	93.8	63-113	5/7/2015	5/13/2015
Benzo(ghi)perylene	4.74	ug/L	5	94.8	71-141	5/7/2015	5/13/2015
Benzo[a]anthracene	4.59	ug/L	5	91.8	71-142	5/7/2015	5/13/2015
Benzo[a]pyrene	4.44	ug/L	5	88.8	71-143	5/7/2015	5/13/2015
2-Methylnaphthalene	4.60	ug/L	5	92.0	56-128	5/7/2015	5/13/2015
Benzo[k]fluoranthene	4.99	ug/L	5	99.8	69-149	5/7/2015	5/13/2015
Pyrene	4.76	ug/L	5	95.2	69-119	5/7/2015	5/13/2015
Dibenz[a,h]anthracene	4.85	ug/L	5	97.0	68-138	5/7/2015	5/13/2015
Fluoranthene	4.81	ug/L	5	96.2	67-120	5/7/2015	5/13/2015
Fluorene	4.44	ug/L	5	88.8	60-116	5/7/2015	5/13/2015
Indeno[1,2,3-cd]pyrene	4.79	ug/L	5	95.8	68-140	5/7/2015	5/13/2015
Naphthalene	3.79	ug/L	5	75.8	51-122	5/7/2015	5/13/2015
Phenanthrene	4.82	ug/L	5	96.4	71-126	5/7/2015	5/13/2015
Benzo[b]fluoranthene	4.94	ug/L	5	98.8	68-148	5/7/2015	5/13/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/7/2015	5/13/2015
Acenaphthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Acenaphthylene	ND	ug/L	0.01	5/7/2015	5/13/2015
Anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Chrysene	ND	ug/L	0.01	5/7/2015	5/13/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Fluorene	ND	ug/L	0.01	5/7/2015	5/13/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505060
Project Name: SVL #W5E0047

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Naphthalene	ND	ug/L	0.01	5/7/2015	5/13/2015
Phenanthrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150505060
Order Date: 5/5/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0047
Comment:

Sample #: 150505060-001 **Customer Sample #:** NSH-011-043015

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/30/2015
Quantity: 4 **Date Received:** 5/5/2015 3:50:00 PM **Time Collected:** 11:10 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/15/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/15/2015	***Normal (~10 Days)***

Sample #: 150505060-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 4/30/2015
Quantity: 1 **Date Received:** 5/5/2015 3:50:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/15/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.1
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0047

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 3.8

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY & ALDRICH
Contact: LAUREN CANNEVA
Address: 400 E. VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: GUNNISON COPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N. 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSION
Sampler's Signature: M.C. Gunn

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc, A.A.	METALS (DISS) LAB TO FILTER	SILICA (DISS) LAB TO FILTER	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAH	VOC (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-011-043015	4/30/15	1110	CG	2	15	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X		SVL will filter and preserve for DISS. metals. CG 5-5-15
2																									
3	TRIP BLANK					1																X			
4																									
5																									ON MONDAY 5/4/15
6																									SHIPPED UPS OVERNIGHT:
7																									179X8 989 23 1001
8																									~~2775~~ 27766
9																									CG 5-4-15
10																									

Relinquished by: M.C. Gunn	Date: 4/30/15	Time: 1500	Received by:	Date: 5-5-15	Time: 9:45
Relinquished by: [signature]	Date: 5-5-15	Time: 1130	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-011-043015	W5E0047-01	Ground Water	30-Apr-15 11:10	CG	05-May-2015	Q3C

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Client Sample ID: **NSH-011-043015**
SVL Sample ID: **W5E0047-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 30-Apr-15 11:10
Received: 05-May-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W519094	AS	05/20/15 10:12	U
EPA 200.7	**Calcium**	45.0	mg/L	0.100	0.029		W519094	AS	05/20/15 10:12	
EPA 200.7	**Iron**	0.167	mg/L	0.060	0.026		W519094	AS	05/20/15 10:12	
EPA 200.7	**Magnesium**	11.0	mg/L	0.20	0.11		W519094	AS	05/20/15 10:12	
EPA 200.7	**Potassium**	1.66	mg/L	0.50	0.17		W519094	AS	05/20/15 10:12	
EPA 200.7	**Silica (SiO2)**	18.8	mg/L	0.17	0.12		W519094	AS	05/20/15 10:12	
EPA 200.7	**Sodium**	18.6	mg/L	0.50	0.05		W519094	AS	05/20/15 10:12	
EPA 200.8	**Antimony**	0.00041	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Arsenic**	0.00036	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Barium**	0.0436	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 06:57	
EPA 200.8	Beryllium	< 0.000048	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 06:57	U
EPA 200.8	**Boron**	0.0902	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 06:57	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 06:57	U
EPA 200.8	**Chromium**	0.0033	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 06:57	
EPA 200.8	**Cobalt**	0.00089	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Copper**	0.00070	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Lead**	0.00049	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Manganese**	0.490	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 06:57	M3
EPA 200.8	**Molybdenum**	0.00414	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 06:57	
EPA 200.8	**Nickel**	0.0048	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 06:57	
EPA 200.8	**Selenium**	0.0014	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 06:57	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 06:57	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 06:57	U
EPA 200.8	**Uranium**	0.00127	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 06:57	
EPA 200.8	**Vanadium**	0.0013	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 06:57	J
EPA 200.8	**Zinc**	0.0057	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 06:57	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W520040	STA	05/13/15 12:25	U
Classical Chemistry Parameters										
EPA 353.2	**Nitrate/Nitrite as N**	0.715	mg/L	0.050	0.027		W520030	SM	05/14/15 13:11	
SM 2320B	**Total Alkalinity**	174	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:05	Q19
SM 2320B	**Bicarbonate**	174	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:05	Q19
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:05	Q19,U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:05	Q19,U
SM 2510 B	**Specific conductance**	367	µmhos/cm	5.00			W519105	RS	05/06/15 07:35	
SM 2540 C	**Total Diss. Solids**	238	mg/L	10			W519107	RS	05/06/15 10:15	
SM 4500 H B	**pH @20.0°C**	7.53	pH Units				W519090	AGF	05/05/15 14:05	H5,Q19
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W519199	VRH	05/08/15 10:30	E9,U
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W519084	SM	05/05/15 15:00	H3,H6,U
SM 4500-S-F	**Sulfide**	0.68	mg/L	1.00	0.39		W519097	SM	05/05/15 16:37	E12,J
SM 5310B	**Total Organic Carbon**	8.43	mg/L	1.00	0.24		W520157	SM	05/13/15 13:24	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Client Sample ID: **NSH-011-043015**
SVL Sample ID: **W5E0047-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 30-Apr-15 11:10
Received: 05-May-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	16.7	mg/L	2.00	0.56	10	W521056	MCE	05/18/15 22:53	D2
EPA 300.0	**Fluoride**	0.955	mg/L	0.100	0.022		W521056	MCE	05/18/15 22:42	
EPA 300.0	**Sulfate as SO4**	15.1	mg/L	0.30	0.05		W521056	MCE	05/18/15 22:42	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.03 meq/L Anion Sum: 4.37 meq/L C/A Balance: -3.98 % Calculated TDS: 235 TDS/cTDS: 1.01 TDS/eC: 0.65

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W519094	20-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W519094	20-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W519094	20-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W519094	20-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W519094	20-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W519094	20-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W519094	20-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W520040	13-May-15	U
Classical Chemistry Parameters								
EPA 353.2	Nitrate/Nitrite as N	mg/L	<0.050	0.027	0.050	W520030	14-May-15	
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.32		1.0	W519090	05-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.32		1.0	W519090	05-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W519090	05-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W519090	05-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W519107	06-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W519199	08-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W519084	05-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W519097	05-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W520157	13-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W521056	18-May-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W521056	18-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W521056	18-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.98	1.00	98.4	85 - 115	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	19.8	20.0	99.2	85 - 115	W519094	20-May-15	
EPA 200.7	Iron	mg/L	9.85	10.0	98.5	85 - 115	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	19.8	20.0	99.1	85 - 115	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	20.0	20.0	100	85 - 115	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	9.98	10.7	93.3	85 - 115	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	18.9	19.0	99.5	85 - 115	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00502	0.00500	100	85 - 115	W520040	13-May-15	
Classical Chemistry Parameters									
EPA 353.2	Nitrate/Nitrite as N	mg/L	2.03	2.00	101	90 - 110	W520030	14-May-15	
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	103	85 - 115	W519090	05-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	103	85 - 115	W519090	05-May-15	
SM 2510 B	Specific conductance	µmhos/cm	316	306	103	90 - 110	W519105	06-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.782	0.786	99.5	90 - 110	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.20	2.50	88.0	80 - 120	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.7	34.3	101	90 - 110	W520157	13-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.96	3.00	98.6	90 - 110	W521056	18-May-15	
EPA 300.0	Fluoride	mg/L	1.93	2.00	96.6	90 - 110	W521056	18-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.73	10.0	97.3	90 - 110	W521056	18-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	146	146	0.1	20	W519090	05-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	146	146	0.1	20	W519090	05-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W519090	05-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W519090	05-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	370	367	0.8	20	W519105	06-May-15	
SM 2540 C	Total Diss. Solids	mg/L	902	913	1.2	10	W519107	06-May-15	
SM 4500 H B	pH	pH Units	7.98	8.01	0.4	20	W519090	05-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	64.7	45.0	20.0	98.1	70 - 130	W519094	20-May-15	
EPA 200.7	Iron	mg/L	10.2	0.167	10.0	100	70 - 130	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	31.1	11.0	20.0	100	70 - 130	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	22.0	1.66	20.0	102	70 - 130	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	29.4	18.8	10.7	99.1	70 - 130	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	37.1	18.6	19.0	97.1	70 - 130	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W520040	13-May-15	
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W520040	13-May-15	
Classical Chemistry Parameters										
EPA 353.2	Nitrate/Nitrite as N	mg/L	2.52	0.455	2.00	103	90 - 110	W520030	14-May-15	
EPA 353.2	Nitrate/Nitrite as N	mg/L	4.87	2.79	2.00	104	90 - 110	W520030	14-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.107	<0.0025	0.100	107	75 - 125	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.486	<0.0058	0.500	97.1	75 - 125	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.28	<0.39	2.50	91.2	80 - 120	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	49.5	0.47	50.0	98.1	80 - 120	W520157	13-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	8.46	5.40	3.00	102	90 - 110	W521056	18-May-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Chloride	mg/L	8.31	5.22	3.00	103	90 - 110	W521056	18-May-15	
EPA 300.0	Fluoride	mg/L	1.99	0.038	2.00	97.7	90 - 110	W521056	18-May-15	
EPA 300.0	Fluoride	mg/L	1.98	0.026	2.00	97.6	90 - 110	W521056	18-May-15	
EPA 300.0	Sulfate as SO4	mg/L	10.2	0.23	10.0	99.9	90 - 110	W521056	18-May-15	
EPA 300.0	Sulfate as SO4	mg/L	10.1	0.07	10.0	100	90 - 110	W521056	18-May-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.07	1.04	1.00	107	3.3	20	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	65.0	64.7	20.0	99.6	0.5	20	W519094	20-May-15	
EPA 200.7	Iron	mg/L	10.2	10.2	10.0	100	0.4	20	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	31.2	31.1	20.0	101	0.5	20	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	22.2	22.0	20.0	103	0.8	20	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	29.6	29.4	10.7	101	0.7	20	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	37.2	37.1	19.0	97.9	0.4	20	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00099	0.00099	0.00100	99.0	0.0	20	W520040	13-May-15	
Classical Chemistry Parameters											
EPA 353.2	Nitrate/Nitrite as N	mg/L	2.54	2.52	2.00	104	1.0	20	W520030	14-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.107	0.100	103	3.8	20	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.490	0.486	0.500	98.0	0.9	20	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.36	2.28	2.50	94.4	3.5	20	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	49.5	50.0	101	3.0	20	W520157	13-May-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	8.52	8.46	3.00	104	0.8	20	W521056	18-May-15	
EPA 300.0	Fluoride	mg/L	2.02	1.99	2.00	98.9	1.2	20	W521056	18-May-15	
EPA 300.0	Sulfate as SO4	mg/L	10.4	10.2	10.0	102	2.1	20	W521056	18-May-15	

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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0047**
Reported: 20-May-15 13:34

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
E12	The reported value is estimated due to the presence of interferents.
E9	The client has requested a reporting limit for this analyte that is lower than our established reporting limit. The concentration reported is below our established reporting limit and is therefore estimated, as it is outside of the calibration range.
H3	Sample was received and/or analysis requested past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q19	Sample is high in sediment. Sample was homogenized, an aliquot was poured off and allowed to settle, then the water portion was decanted and analyzed.
Q3C	SVL filtered and preserved samples.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-013-050415	W5E0049-01	Ground Water	04-May-15 12:30	CP	05-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Client Sample ID: **NSH-013-050415**
SVL Sample ID: **W5E0049-01 (Ground Water)**

Sample Report Page 1 of 2

Sampled: 04-May-15 12:30
Received: 05-May-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W519094	AS	05/20/15 10:21	U
EPA 200.7	**Calcium**	28.2	mg/L	0.100	0.029		W519094	AS	05/20/15 10:21	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W519094	AS	05/20/15 10:21	U
EPA 200.7	**Magnesium**	21.0	mg/L	0.20	0.11		W519094	AS	05/20/15 10:21	
EPA 200.7	**Potassium**	2.26	mg/L	0.50	0.17		W519094	AS	05/20/15 10:21	
EPA 200.7	**Silica (SiO2)**	39.5	mg/L	0.17	0.12		W519094	AS	05/20/15 10:21	
EPA 200.7	**Sodium**	19.1	mg/L	0.50	0.05		W519094	AS	05/20/15 10:21	
EPA 200.8	**Antimony**	0.00104	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 07:04	J
EPA 200.8	**Arsenic**	0.00149	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 07:04	J
EPA 200.8	**Barium**	0.0180	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Beryllium**	0.00014	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 07:04	J
EPA 200.8	**Boron**	0.0483	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 07:04	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 07:04	U
EPA 200.8	**Chromium**	0.0041	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 07:04	J
EPA 200.8	**Copper**	0.00405	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Lead**	0.00026	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 07:04	J
EPA 200.8	**Manganese**	0.00152	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Molybdenum**	0.0860	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Nickel**	0.0011	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Selenium**	0.0031	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 07:04	
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 07:04	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 07:04	U
EPA 200.8	**Uranium**	0.00556	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Vanadium**	0.0032	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 07:04	
EPA 200.8	**Zinc**	0.477	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 07:04	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W519148	STA	05/07/15 14:41	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	146	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:00	
SM 2320B	**Bicarbonate**	146	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:00	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:00	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W519090	AGF	05/05/15 14:00	U
SM 2510 B	**Specific conductance**	371	µmhos/cm	5.00			W519105	RS	05/06/15 07:35	
SM 2540 C	**Total Diss. Solids**	237	mg/L	10			W519107	RS	05/06/15 10:15	
SM 4500 H B	**pH @20.0°C**	8.01	pH Units				W519090	AGF	05/05/15 14:00	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W519199	VRH	05/08/15 10:38	U,E9
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W519084	SM	05/05/15 15:00	H6,U
SM 4500-S-F	Sulfide	< 0.39	mg/L	1.00	0.39		W519097	SM	05/05/15 16:37	U
SM 5310B	**Total Organic Carbon**	0.37	mg/L	1.00	0.24		W520157	SM	05/13/15 13:37	J

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Client Sample ID: **NSH-013-050415**
SVL Sample ID: **W5E0049-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 04-May-15 12:30
Received: 05-May-15
Sampled By: CP

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	21.8	mg/L	2.00	0.56	10	W519080	MCE	05/05/15 13:53	D2
EPA 300.0	**Fluoride**	4.38	mg/L	0.100	0.022		W519080	MCE	05/05/15 13:41	
EPA 300.0	**Nitrate as N**	1.00	mg/L	0.050	0.008		W519080	MCE	05/05/15 13:41	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W519080	MCE	05/05/15 13:41	U
EPA 300.0	**Sulfate as SO4**	10.4	mg/L	0.30	0.05		W519080	MCE	05/05/15 13:41	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.04 meq/L Anion Sum: 4.05 meq/L C/A Balance: -0.10 % Calculated TDS: 239 TDS/cTDS: 0.99 TDS/eC: 0.64

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W519094	20-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W519094	20-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W519094	20-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W519094	20-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W519094	20-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W519094	20-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W519094	20-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W519148	07-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.32		1.0	W519090	05-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.32		1.0	W519090	05-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W519090	05-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W519090	05-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W519107	06-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W519199	08-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W519084	05-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W519097	05-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W520157	13-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W519080	05-May-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W519080	05-May-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W519080	05-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W519080	05-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W519080	05-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.98	1.00	98.4	85 - 115	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	19.8	20.0	99.2	85 - 115	W519094	20-May-15	
EPA 200.7	Iron	mg/L	9.85	10.0	98.5	85 - 115	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	19.8	20.0	99.1	85 - 115	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	20.0	20.0	100	85 - 115	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	9.98	10.7	93.3	85 - 115	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	18.9	19.0	99.5	85 - 115	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00528	0.00500	106	85 - 115	W519148	07-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	103	85 - 115	W519090	05-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	103	85 - 115	W519090	05-May-15	
SM 2510 B	Specific conductance	µmhos/cm	316	306	103	90 - 110	W519105	06-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.782	0.786	99.5	90 - 110	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.20	2.50	88.0	80 - 120	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.7	34.3	101	90 - 110	W520157	13-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.96	3.00	98.6	90 - 110	W519080	05-May-15	
EPA 300.0	Fluoride	mg/L	1.94	2.00	96.9	90 - 110	W519080	05-May-15	
EPA 300.0	Nitrate as N	mg/L	1.96	2.01	97.4	90 - 110	W519080	05-May-15	
EPA 300.0	Nitrite as N	mg/L	2.55	2.51	102	90 - 110	W519080	05-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.89	10.0	98.9	90 - 110	W519080	05-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	146	146	0.1	20	W519090	05-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	146	146	0.1	20	W519090	05-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W519090	05-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W519090	05-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	370	367	0.8	20	W519105	06-May-15	
SM 2540 C	Total Diss. Solids	mg/L	902	913	1.2	10	W519107	06-May-15	
SM 4500 H B	pH	pH Units	7.98	8.01	0.4	20	W519090	05-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	64.7	45.0	20.0	98.1	70 - 130	W519094	20-May-15	
EPA 200.7	Iron	mg/L	10.2	0.167	10.0	100	70 - 130	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	31.1	11.0	20.0	100	70 - 130	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	22.0	1.66	20.0	102	70 - 130	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	29.4	18.8	10.7	99.1	70 - 130	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	37.1	18.6	19.0	97.1	70 - 130	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.0280	0.0268	0.00100	118	70 - 130	W519148	07-May-15	D2,M3
EPA 245.1	Mercury	mg/L	0.00109	<0.00004	0.00100	109	70 - 130	W519148	07-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.107	<0.0025	0.100	107	75 - 125	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.486	<0.0058	0.500	97.1	75 - 125	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.28	<0.39	2.50	91.2	80 - 120	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	49.5	0.47	50.0	98.1	80 - 120	W520157	13-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	16.1	13.1	3.00	99.9	90 - 110	W519080	05-May-15	D2
EPA 300.0	Fluoride	mg/L	1.96	0.053	2.00	95.4	90 - 110	W519080	05-May-15	
EPA 300.0	Nitrate as N	mg/L	4.93	2.84	2.00	104	90 - 110	W519080	05-May-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0049**
Reported: 20-May-15 13:39

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Nitrite as N	mg/L	2.22	0.142	2.00	104	90 - 110	W519080	05-May-15	
EPA 300.0	Sulfate as SO4	mg/L	22.9	12.7	10.0	102	90 - 110	W519080	05-May-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.07	1.04	1.00	107	3.3	20	W519094	20-May-15	
EPA 200.7	Calcium	mg/L	65.0	64.7	20.0	99.6	0.5	20	W519094	20-May-15	
EPA 200.7	Iron	mg/L	10.2	10.2	10.0	100	0.4	20	W519094	20-May-15	
EPA 200.7	Magnesium	mg/L	31.2	31.1	20.0	101	0.5	20	W519094	20-May-15	
EPA 200.7	Potassium	mg/L	22.2	22.0	20.0	103	0.8	20	W519094	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	29.6	29.4	10.7	101	0.7	20	W519094	20-May-15	
EPA 200.7	Sodium	mg/L	37.2	37.1	19.0	97.9	0.4	20	W519094	20-May-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.0279	0.0280	0.00100	108	0.4	20	W519148	07-May-15	D2,M3
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.107	0.100	103	3.8	20	W519199	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.490	0.486	0.500	98.0	0.9	20	W519084	05-May-15	
SM 4500-S-F	Sulfide	mg/L	2.36	2.28	2.50	94.4	3.5	20	W519097	05-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	49.5	50.0	101	3.0	20	W520157	13-May-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	16.0	16.1	3.00	98.4	0.3	20	W519080	05-May-15	D2
EPA 300.0	Fluoride	mg/L	2.01	1.96	2.00	97.8	2.4	20	W519080	05-May-15	
EPA 300.0	Nitrate as N	mg/L	4.99	4.93	2.00	108	1.2	20	W519080	05-May-15	
EPA 300.0	Nitrite as N	mg/L	2.28	2.22	2.00	107	2.6	20	W519080	05-May-15	
EPA 300.0	Sulfate as SO4	mg/L	23.1	22.9	10.0	104	0.9	20	W519080	05-May-15	

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Excelsior Mining Corp.	**Project Name: Gunnison Copper 2015**
2999 N. 44th St. #300	Work Order: **W5E0049**
Phoenix, AZ 85018	Reported: 20-May-15 13:39

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
E9	The client has requested a reporting limit for this analyte that is lower than our established reporting limit. The concentration reported is below our established reporting limit and is therefore estimated, as it is outside of the calibration range.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Monday, June 08, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505194
Project Name:
Project Number: 5E0049

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/11/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505194

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505194
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0049
Client PO Number: 15287

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-013-050415	1505194-1		WATER	04-May-15	12:30

1505194

ALS

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5E0049

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAME
Address:
Phone Number:
FAX Number:
PO#: 15287

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross α/β 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																	Call Chris Meyer with Questions
(1) 1	NSH-013-050415	5/4/15	1330	CP	2	3			X					X	X	X		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
J Jacobson	5-5-15	1247	[signature]	05-11-15	0945
Fedex	05-11-15	0945			

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1505194

Project Manager: JRK Initials: SDM Date: 05-11-15

1. Does this project require any special handling in addition to standard ALS procedures?			YES	NO
2. Are custody seals on shipping containers intact?	NONE		YES	NO
3. Are Custody seals on sample containers intact?	NONE		YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?			YES	NO
5. Are the COC and bottle labels complete and legible?			YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)			YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF		YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A		YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A		YES	NO
10. Is there sufficient sample for the requested analyses?			YES	NO
11. Were all samples placed in the proper containers for the requested analyses?			YES	NO
12. Are all samples within holding times for the requested analyses?			YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)			YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	N/A		YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____heavy	N/A		YES	NO
16. Were the samples shipped on ice?			YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY		YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-11-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

1505194

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

20 LBS

1 OF 1

DWT: 14,12,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

13
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4402 3522

BILLING: P/P

Client: SVL Analytical
Project: 5E0049
Sample ID: NSH-013-050415
Legal Location:
Collection Date: 5/4/2015 12:30

Date: *08-Jun-15*
Work Order: 1505194
Lab ID: 1505194-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**		Prep Date: **6/1/2015**		PrepBy: **DKL**
GROSS ALPHA	2.6 (+/- 1.4)	LT	2.3	pCi/l	NA	6/3/2015 09:45
GROSS BETA	**6.4 (+/- 2)**		**3**	**pCi/l**	NA	6/3/2015 09:45
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**		Prep Date: **6/2/2015**		PrepBy: **CAS**
Tracer: U-232	*78.1*		*30-110*	*%REC*	DL = NA	6/5/2015 07:41
U-234	**2.77 (+/- 0.57)**		**0.09**	**pCi/l**	NA	6/5/2015 07:41
U-235	0.162 (+/- 0.094)	LT	0.034	pCi/l	NA	6/5/2015 07:41
U-238	**2.26 (+/- 0.48)**		**0.03**	**pCi/l**	NA	6/5/2015 07:41
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**		Prep Date: **5/19/2015**		PrepBy: **PJW**
Ra-226	0.23 (+/- 0.15)	LT	0.15	pCi/l	NA	5/26/2015 13:56
Carr: BARIUM	*87.6*		*40-110*	*%REC*	DL = NA	5/26/2015 13:56
Radium-228 Analysis by GFPC		**PAI 724**		Prep Date: **5/14/2015**		PrepBy: **DKL**
Ra-228	ND (+/- 0.29)	U	0.62	pCi/l	NA	5/19/2015 09:03
Carr: BARIUM	*87.6*		*40-110*	*%REC*	DL = NA	5/19/2015 09:03

Client:	SVL Analytical	**Date:**	*08-Jun-15*
Project:	5E0049	**Work Order:**	1505194
Sample ID:	NSH-013-050415	**Lab ID:**	1505194-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/4/2015 12:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505194
Project: 5E0049

Date: *6/8/2015 1:42:3*

QC BATCH REPORT

Batch ID: **RE150519-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.4 (+/- 7.4)	0.3	30.71		95.6	67-120					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	28.4 (+/- 7.2)	0.4	30.71		92.4	67-120		29.4	0.09	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.182									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505194-1

Client: SVL Analytical
Work Order: 1505194
Project: 5E0049

QC BATCH REPORT

Batch ID: **AS150602-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.94 (+/- 0.88)	0.05	4.416		112	82-122					P
U-238	4.62 (+/- 0.82)	0.04	4.585		101	78-126					P
Tracer: U-232	3.5	0.06	4.165		84.1	30-110					

LCSD Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	5.05 (+/- 0.9)	0.07	4.416		114	82-122		4.94	0.09	2.1	P
U-238	4.86 (+/- 0.87)	0.04	4.585		106	78-126		4.62	0.2	2.1	P
Tracer: U-232	3.25	0.08	4.165		78.1	30-110		3.5			

MB Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/6/2015 11:24**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.02									U
U-235	ND	0.027									U
U-238	ND	0.03									U
Tracer: U-232	2.96	0.03	4.164		71.1	30-110					

The following samples were analyzed in this batch: 1505194-1

Client: SVL Analytical
Work Order: 1505194
Project: 5E0049

QC BATCH REPORT

Batch ID: **AB150601-2-4** Instrument ID **LB4100-A** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 09:31**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	191 (+/- 32)	3	224.2		85.3	70-130					P
GROSS BETA	204 (+/- 33)	5	203.6		100	70-130					P,M3

MB Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 15:29**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.64									U
GROSS BETA	ND	1.05									U

The following samples were analyzed in this batch: 1505194-1

Client: SVL Analytical
Work Order: 1505194
Project: 5E0049

QC BATCH REPORT

Batch ID: **RA150514-1-2** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.3 (+/- 2)	0.5	7.779		106	70-130					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8 (+/- 1.9)	0.5	7.779		103	70-130		8.3	0.1	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.46									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505194-1

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-001	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	NSH-013-050415	**Sampling Time**	12:30 PM		
Matrix	Water	**Sample Location**	W5E0049-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Acetone	ND	ug/L	0.5	2.5	5/7/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-001	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	NSH-013-050415	**Sampling Time**	12:30 PM		
Matrix	Water	**Sample Location**	W5E0049-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromodichloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-001	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	NSH-013-050415	**Sampling Time**	12:30 PM		
Matrix	Water	**Sample Location**	W5E0049-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150505059-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.4	70-130
Bromofluorobenzene	EPA 524.3	93.4	70-130
Toluene-d8	EPA 524.3	99.2	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-002	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0049-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2-Butanone	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Acetone	64.4	ug/L	0.5	2.5	5/7/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Benzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-002	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015	3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0049-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromoform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Bromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Carbon disulfide	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloroform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Chloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dibromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dibromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Diethyl ether	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Ethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Iodomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Isopropylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
m+p-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Methylene chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Naphthalene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
n-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
n-Propylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
o-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Styrene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-002	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0049-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Tetrachloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Toluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Trichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	
Vinyl Chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	

Surrogate Data

Sample Number 150505059-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.6	70-130
Bromofluorobenzene	EPA 524.3	95.4	70-130
Toluene-d8	EPA 524.3	94.2	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
Toluene	9.82	ug/L	10	98.2	70-130	5/7/2015	5/7/2015
Tetrachloroethene	10.3	ug/L	10	103.0	70-130	5/7/2015	5/7/2015
Ethylbenzene	9.96	ug/L	10	99.6	70-130	5/7/2015	5/7/2015
Chlorobenzene	9.63	ug/L	10	96.3	70-130	5/7/2015	5/7/2015
Benzene	9.85	ug/L	10	98.5	70-130	5/7/2015	5/7/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150501011-001	Trichloroethene	ND	9.42	ug/L	10	94.2	70-130	5/7/2015	5/7/2015
150501011-001	Toluene	ND	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
150501011-001	Tetrachloroethene	ND	7.62	ug/L	10	76.2	70-130	5/7/2015	5/7/2015
150501011-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-130	5/7/2015	5/7/2015
150501011-001	Chlorobenzene	ND	9.52	ug/L	10	95.2	70-130	5/7/2015	5/7/2015
150501011-001	Benzene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015
150501011-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.07	ug/L	10	90.7	3.8	0-30	5/7/2015	5/7/2015
Toluene	10.4	ug/L	10	104.0	3.8	0-30	5/7/2015	5/7/2015
Tetrachloroethene	7.56	ug/L	10	75.6	0.8	0-30	5/7/2015	5/7/2015
Ethylbenzene	10.3	ug/L	10	103.0	1.0	0-30	5/7/2015	5/7/2015
Chlorobenzene	9.68	ug/L	10	96.8	1.7	0-30	5/7/2015	5/7/2015
Benzene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-dichloropropene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
2-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
4-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Benzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromodichloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromoform	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Chlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroform	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Ethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Hexachlorobutadiene	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

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Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Isopropylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Methylene chloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Naphthalene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Propylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
p-isopropyltoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
sec-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Styrene	ND	ug/L	0.5	5/7/2015	5/7/2015
tert-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Tetrachloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Toluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Total Xylene	ND	ug/L	0.5	5/7/2015	5/7/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Vinyl Chloride	ND	ug/L	0.5	5/7/2015	5/7/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Sample Number	150505059-001	**Sampling Date**	5/4/2015	**Date/Time Received**	5/5/2015 3:50 PM
Client Sample ID	NSH-013-050415	**Sampling Time**	12:30 PM	**Extraction Date**	5/7/2015
Matrix	Water	**Sample Location**	W5E0049-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Acenaphthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Acenaphthylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Chrysene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Fluorene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Naphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Phenanthrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	
Pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	

Surrogate Data

Sample Number 150505059-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	72.8	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.66	ug/L	5	93.2	62-139	5/7/2015	5/13/2015
Acenaphthene	4.41	ug/L	5	88.2	70-135	5/7/2015	5/13/2015
Acenaphthylene	4.28	ug/L	5	85.6	67-121	5/7/2015	5/13/2015
Anthracene	4.69	ug/L	5	93.8	63-113	5/7/2015	5/13/2015
Benzo(ghi)perylene	4.74	ug/L	5	94.8	71-141	5/7/2015	5/13/2015
Benzo[a]anthracene	4.59	ug/L	5	91.8	71-142	5/7/2015	5/13/2015
Benzo[a]pyrene	4.44	ug/L	5	88.8	71-143	5/7/2015	5/13/2015
2-Methylnaphthalene	4.60	ug/L	5	92.0	56-128	5/7/2015	5/13/2015
Benzo[k]fluoranthene	4.99	ug/L	5	99.8	69-149	5/7/2015	5/13/2015
Pyrene	4.76	ug/L	5	95.2	69-119	5/7/2015	5/13/2015
Dibenz[a,h]anthracene	4.85	ug/L	5	97.0	68-138	5/7/2015	5/13/2015
Fluoranthene	4.81	ug/L	5	96.2	67-120	5/7/2015	5/13/2015
Fluorene	4.44	ug/L	5	88.8	60-116	5/7/2015	5/13/2015
Indeno[1,2,3-cd]pyrene	4.79	ug/L	5	95.8	68-140	5/7/2015	5/13/2015
Naphthalene	3.79	ug/L	5	75.8	51-122	5/7/2015	5/13/2015
Phenanthrene	4.82	ug/L	5	96.4	71-126	5/7/2015	5/13/2015
Benzo[b]fluoranthene	4.94	ug/L	5	98.8	68-148	5/7/2015	5/13/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/7/2015	5/13/2015
Acenaphthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Acenaphthylene	ND	ug/L	0.01	5/7/2015	5/13/2015
Anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Chrysene	ND	ug/L	0.01	5/7/2015	5/13/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/7/2015	5/13/2015
Fluoranthene	ND	ug/L	0.01	5/7/2015	5/13/2015
Fluorene	ND	ug/L	0.01	5/7/2015	5/13/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150505059
Project Name: SVL #W5E0049

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Naphthalene	ND	ug/L	0.01	5/7/2015	5/13/2015
Phenanthrene	ND	ug/L	0.01	5/7/2015	5/13/2015
Pyrene	ND	ug/L	0.01	5/7/2015	5/13/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150505059
Order Date: 5/5/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0049
Comment:

Sample #: 150505059-001 **Customer Sample #:** NSH-013-050415

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/4/2015
Quantity: 4 **Date Received:** 5/5/2015 3:50:00 PM **Time Collected:** 12:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/15/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/15/2015	***Normal (~10 Days)***

Sample #: 150505059-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/4/2015
Quantity: 1 **Date Received:** 5/5/2015 3:50:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/15/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.1
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0049

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: Haley and Aldrich
Contact: Lauren Candreva
Address: 400 E. Van Buren St. Suite 545, Phoenix, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail: lcandreva@haleyAldrich.com

Invoice Sent To: Rebecca Sawyer
Contact: Gunnison Copper Project
Address: 2999 N. 44th St. Suite 300, Phoenix, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior
Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radio Chem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-013-050415	5-4-15	1230	CP	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Metals & Silica sample was filtered onsite with 0.45 µm disposable groundwater filter capsule with HNO_3.
2																									
3	Trip Blank					1																X			Trip blank dated 8-26-13
4																									
5																									Shipped UPS #
6																									1Z 9X8 989 23 1001
7																									2579
8																									
9																									
10																									

Relinquished by:	Date: 5-4-15	Time: 15:00	Received by:	Date: 5-5-15	Time: 10:00
Relinquished by:	Date: 5-5-15	Time: 1130	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

Monday, June 08, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505191
Project Name:
Project Number: 5E0072

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/11/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505191

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am . Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505191
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0072
Client PO Number: 15294

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-025-050515	1505191-1		WATER	05-May-15	12:00

ALS

1505191

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 5E0072

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15294

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross α/β 900.0	Rad 226/228 903.1/904	U 234/235/238 ASTM D3972							Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, ø and O. Thanks!																							
(1) 1	NSH-025-050515	5/5/15	1200	KF	2	3			X					X	X	X								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Comments: Call Chris Meyer with Questions

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
L Jacobson	5-6-15	1245	Scott Malley	5-11-15	0945
FEDEX	5-11-15	0945			

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1505191

Project Manager: JRK Initials: SDM Date: 05-11-15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	NONE	(YES)	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	(N/A)	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____heavy	N/A	(YES)	NO
16. Were the samples shipped on ice?		YES	(NO)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

15.) Sample 1 (NSH-025-050515) all three bottles have a light dusting of Sediment.

If applicable, was the client contacted? **YES / NO** (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-11-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1505191

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

12 LBS

DWT: 14,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

13
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4409 6196

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31 63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.
RRD R 0215

Client: SVL Analytical
Project: 5E0072
Sample ID: NSH-025-050515
Legal Location:
Collection Date: 5/5/2015 12:00

Date: *08-Jun-15*
Work Order: 1505191
Lab ID: 1505191-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **6/1/2015**	PrepBy: **DKL**
GROSS ALPHA	**12.1 (+/- 2.9)**		**2.6**	**pCi/l**	NA	6/3/2015 15:29
GROSS BETA	**67 (+/- 11)**		**4**	**pCi/l**	NA	6/3/2015 15:29
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **6/2/2015**	PrepBy: **CAS**
Tracer: U-232	*85.6*		*30-110*	*%REC*	DL = NA	6/5/2015 07:41
U-234	**8.7 (+/- 1.5)**		**0.1**	**pCi/l**	NA	6/5/2015 07:41
U-235	**0.26 (+/- 0.12)**		**0.08**	**pCi/l**	NA	6/5/2015 07:41
U-238	**5.4 (+/- 1)**		**0.1**	**pCi/l**	NA	6/5/2015 07:41
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/19/2015**	PrepBy: **PJW**
Ra-226	0.72 (+/- 0.29)	LT	0.16	pCi/l	NA	5/26/2015 13:56
Carr: BARIUM	*79.7*		*40-110*	*%REC*	DL = NA	5/26/2015 13:56
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **5/14/2015**	PrepBy: **DKL**
Ra-228	0.78 (+/- 0.38)	LT	0.67	pCi/l	NA	5/19/2015 09:03
Carr: BARIUM	*79.7*		*40-110*	*%REC*	DL = NA	5/19/2015 09:03

Client:	SVL Analytical	**Date:**	*08-Jun-15*
Project:	5E0072	**Work Order:**	1505191
Sample ID:	NSH-025-050515	**Lab ID:**	1505191-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/5/2015 12:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505191
Project: 5E0072

Date: *6/8/2015 12:34:*

QC BATCH REPORT

Batch ID: **RE150519-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.4 (+/- 7.4)	0.3	30.71		95.6	67-120					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	28.4 (+/- 7.2)	0.4	30.71		92.4	67-120		29.4	0.09	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RE150519-1** Units: **pCi/l** Analysis Date: **5/26/2015 14:36**
Client ID: Run ID: **RE150519-1A** Prep Date: **5/19/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.182									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505191-1

Client: SVL Analytical
Work Order: 1505191
Project: 5E0072

QC BATCH REPORT

Batch ID: **AS150602-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.94 (+/- 0.88)	0.05	4.416		112	82-122					P
U-238	4.62 (+/- 0.82)	0.04	4.585		101	78-126					P
Tracer: U-232	3.5	0.06	4.165		84.1	30-110					

LCSD Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	5.05 (+/- 0.9)	0.07	4.416		114	82-122		4.94	0.09	2.1	P
U-238	4.86 (+/- 0.87)	0.04	4.585		106	78-126		4.62	0.2	2.1	P
Tracer: U-232	3.25	0.08	4.165		78.1	30-110		3.5			

MB Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/6/2015 11:24**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.02									U
U-235	ND	0.027									U
U-238	ND	0.03									U
Tracer: U-232	2.96	0.03	4.164		71.1	30-110					

The following samples were analyzed in this batch: 1505191-1

Client: SVL Analytical
Work Order: 1505191
Project: 5E0072

QC BATCH REPORT

Batch ID: **AB150601-2-4** Instrument ID **LB4100-A** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 09:31**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	191 (+/- 32)	3	224.2		85.3	70-130					P
GROSS BETA	204 (+/- 33)	5	203.6		100	70-130					P,M3

MB Sample ID: **AB150601-2** Units: **pCi/l** Analysis Date: **6/3/2015 15:29**

Client ID: Run ID: **AB150601-2A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.64									U
GROSS BETA	ND	1.05									U

The following samples were analyzed in this batch: 1505191-1

Client: SVL Analytical
Work Order: 1505191
Project: 5E0072

QC BATCH REPORT

Batch ID: **RA150514-1-2** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.3 (+/- 2)	0.5	7.779		106	70-130					P
Carr: BARIUM	30390		34500		88.1	40-110					

LCSD Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8 (+/- 1.9)	0.5	7.779		103	70-130		8.3	0.1	2.1	P
Carr: BARIUM	30650		34540		88.7	40-110		30390			

MB Sample ID: **RA150514-1** Units: **pCi/l** Analysis Date: **5/19/2015 09:03**
Client ID: Run ID: **RA150514-1A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.46									U
Carr: BARIUM	31180		34490		90.4	40-110					

The following samples were analyzed in this batch: 1505191-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015 11:55 AM
Client Sample ID	NSH-025-050515	**Sampling Time**	12:00 PM		
Matrix	Water	**Sample Location**	W5E0072-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	50	5/7/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015 11:55 AM
Client Sample ID	NSH-025-050515	**Sampling Time**	12:00 PM		
Matrix	Water	**Sample Location**	W5E0072-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015 11:55 AM
Client Sample ID	NSH-025-050515	**Sampling Time**	12:00 PM		
Matrix	Water	**Sample Location**	W5E0072-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Toluene	379	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	10	5/7/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150507027-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	101.0	70-130
Bromofluorobenzene	EPA 524.3	102.6	70-130
Toluene-d8	EPA 524.3	105.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001A	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015	11:55 AM
Client Sample ID	NSH-025-050515 DUPLICATE	**Sampling Time**	12:00 PM			
Matrix	Water	**Sample Location**	W5E0072-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	50	5/13/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001A	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015	11:55 AM
Client Sample ID	NSH-025-050515 DUPLICATE	**Sampling Time**	12:00 PM			
Matrix	Water	**Sample Location**	W5E0072-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001A	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015	11:55 AM
Client Sample ID	NSH-025-050515 DUPLICATE	**Sampling Time**	12:00 PM			
Matrix	Water	**Sample Location**	W5E0072-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Toluene	482	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	10	5/13/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150507027-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.8	70-130
Bromofluorobenzene	EPA 524.3	90.4	70-130
Toluene-d8	EPA 524.3	98.0	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/7/2015 11:55 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0072-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Acetone	70.3	ug/L	0.5	2.5	5/7/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/7/2015 11:55 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0072-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/7/2015	11:55 AM	
Client Sample ID	TRIP BLANK	**Sampling Time**					
Matrix	Water	**Sample Location**	W5E0072-02				
Comments							

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/7/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150507027-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.4	70-130
Bromofluorobenzene	EPA 524.3	93.6	70-130
Toluene-d8	EPA 524.3	95.6	70-130

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
Toluene	9.82	ug/L	10	98.2	70-130	5/7/2015	5/7/2015
Tetrachloroethene	10.3	ug/L	10	103.0	70-130	5/7/2015	5/7/2015
Ethylbenzene	9.96	ug/L	10	99.6	70-130	5/7/2015	5/7/2015
Chlorobenzene	9.63	ug/L	10	96.3	70-130	5/7/2015	5/7/2015
Benzene	9.85	ug/L	10	98.5	70-130	5/7/2015	5/7/2015
1,1-Dichloroethene	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150501011-001	Trichloroethene	ND	9.42	ug/L	10	94.2	70-130	5/7/2015	5/7/2015
150501011-001	Toluene	ND	10.8	ug/L	10	108.0	70-130	5/7/2015	5/7/2015
150501011-001	Tetrachloroethene	ND	7.62	ug/L	10	76.2	70-130	5/7/2015	5/7/2015
150501011-001	Ethylbenzene	ND	10.2	ug/L	10	102.0	70-130	5/7/2015	5/7/2015
150501011-001	Chlorobenzene	ND	9.52	ug/L	10	95.2	70-130	5/7/2015	5/7/2015
150501011-001	Benzene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015
150501011-001	1,1-Dichloroethene	ND	10.5	ug/L	10	105.0	70-130	5/7/2015	5/7/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	9.07	ug/L	10	90.7	3.8	0-30	5/7/2015	5/7/2015
Toluene	10.4	ug/L	10	104.0	3.8	0-30	5/7/2015	5/7/2015
Tetrachloroethene	7.56	ug/L	10	75.6	0.8	0-30	5/7/2015	5/7/2015
Ethylbenzene	10.3	ug/L	10	103.0	1.0	0-30	5/7/2015	5/7/2015
Chlorobenzene	9.68	ug/L	10	96.8	1.7	0-30	5/7/2015	5/7/2015
Benzene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	1.9	0-30	5/7/2015	5/7/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,1-dichloropropene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/7/2015	5/7/2015
2-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
4-Chlorotoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Acetone	ND	ug/L	2.5	5/7/2015	5/7/2015
Benzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromodichloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromoform	ND	ug/L	0.5	5/7/2015	5/7/2015
Bromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Chlorobenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloroform	ND	ug/L	0.5	5/7/2015	5/7/2015
Chloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromochloromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dibromomethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Ethylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/7/2015	5/7/2015
Isopropylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Methylene chloride	ND	ug/L	0.5	5/7/2015	5/7/2015
Naphthalene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
n-Propylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
p-isopropyltoluene	ND	ug/L	0.5	5/7/2015	5/7/2015
sec-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Styrene	ND	ug/L	0.5	5/7/2015	5/7/2015
tert-Butylbenzene	ND	ug/L	0.5	5/7/2015	5/7/2015
Tetrachloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Toluene	ND	ug/L	0.5	5/7/2015	5/7/2015
Total Xylene	ND	ug/L	0.5	5/7/2015	5/7/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichloroethene	ND	ug/L	0.5	5/7/2015	5/7/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/7/2015	5/7/2015
Vinyl Chloride	ND	ug/L	0.5	5/7/2015	5/7/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Sample Number	150507027-001	**Sampling Date**	5/5/2015	**Date/Time Received**	5/7/2015	11:55 AM
Client Sample ID	NSH-025-050515	**Sampling Time**	12:00 PM	**Extraction Date**	5/11/2015	
Matrix	Water	**Sample Location**	W5E0072-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Naphthalene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Phenanthrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	5/13/2015	TGT	EPA 8270D	U

Surrogate Data

Sample Number 150507027-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	82.0	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit
U Compound was analyzed for but not detected

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	4.77	ug/L	5	95.4	60-137	5/11/2015	5/13/2015
Acenaphthene	4.37	ug/L	5	87.4	58-118	5/11/2015	5/13/2015
Acenaphthylene	4.36	ug/L	5	87.2	52-124	5/11/2015	5/13/2015
Anthracene	4.70	ug/L	5	94.0	59-122	5/11/2015	5/13/2015
Benzo(ghi)perylene	4.62	ug/L	5	92.4	50-136	5/11/2015	5/13/2015
Benzo[a]anthracene	4.91	ug/L	5	98.2	71-124	5/11/2015	5/13/2015
Benzo[a]pyrene	4.37	ug/L	5	87.4	53-133	5/11/2015	5/13/2015
2-Methylnaphthalene	4.93	ug/L	5	98.6	56-128	5/11/2015	5/13/2015
Benzo[k]fluoranthene	4.71	ug/L	5	94.2	50-143	5/11/2015	5/13/2015
Pyrene	4.85	ug/L	5	97.0	53-130	5/11/2015	5/13/2015
Dibenz[a,h]anthracene	4.62	ug/L	5	92.4	52-140	5/11/2015	5/13/2015
Fluoranthene	4.92	ug/L	5	98.4	57-134	5/11/2015	5/13/2015
Fluorene	4.47	ug/L	5	89.4	61-123	5/11/2015	5/13/2015
Indeno[1,2,3-cd]pyrene	4.63	ug/L	5	92.6	51-137	5/11/2015	5/13/2015
Naphthalene	4.00	ug/L	5	80.0	53-120	5/11/2015	5/13/2015
Phenanthrene	4.82	ug/L	5	96.4	60-124	5/11/2015	5/13/2015
Benzo[b]fluoranthene	4.82	ug/L	5	96.4	60-139	5/11/2015	5/13/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/11/2015	5/13/2015
Acenaphthene	ND	ug/L	0.01	5/11/2015	5/13/2015
Acenaphthylene	ND	ug/L	0.01	5/11/2015	5/13/2015
Anthracene	ND	ug/L	0.01	5/11/2015	5/13/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/11/2015	5/13/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/11/2015	5/13/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/11/2015	5/13/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/11/2015	5/13/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/11/2015	5/13/2015
Chrysene	ND	ug/L	0.01	5/11/2015	5/13/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/11/2015	5/13/2015
Fluoranthene	ND	ug/L	0.01	5/11/2015	5/13/2015
Fluorene	ND	ug/L	0.01	5/11/2015	5/13/2015

Comments:

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150507027
Project Name: SVL #W5E0072

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/11/2015	5/13/2015
Naphthalene	ND	ug/L	0.01	5/11/2015	5/13/2015
Phenanthrene	ND	ug/L	0.01	5/11/2015	5/13/2015
Pyrene	ND	ug/L	0.01	5/11/2015	5/13/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150507027
Order Date: 5/7/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0072
Comment:

Sample #: 150507027-001 **Customer Sample #:** NSH-025-050515

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/5/2015
Quantity: 4 **Date Received:** 5/7/2015 11:55:00 AM **Time Collected:** 12:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/19/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/19/2015	***Normal (~10 Days)***

Sample #: 150507027-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/6/2015
Quantity: 1 **Date Received:** 5/7/2015 11:55:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/19/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	4.9
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0072

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.4°C

CHAIN OF CUSTODY RECORD

Page ____ of ____

SVL ANALYTICAL
SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	TOC, PAH	VOCs (524.3)	Radiochem, Isotopes	Rush Instructions (Days)	Comments
* 1	NSH-Ø25-Ø5Ø515	5-5-15		KF	2	15	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		METAL/SILICA SAMPLE WAS FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE, PRESERVED WITH HNO_3
2																									
3	TRIP BLANK					1																X			
4																									
5																									
6																									SHIPPED UPS OVERNIGHT:
7																									1Z 988 989 23 1001
8																									2755
9																									
10																									

Relinquished by: [signature]	Date: 5-5-15	Time: 14:00	Received by: [signature]	Date: 5/6/15	Time: 10:10
Relinquished by: [signature]	Date: 5-6-15	Time: 1240	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

* SVL RECORDED TIME FROM SAMPLE ID. (12:00) OF 5/6/15

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-025-050515	W5E0072-01	Water	05-May-15 12:00	KF	06-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Client Sample ID: **NSH-025-050515**
SVL Sample ID: **W5E0072-01 (Water)**

Sampled: 05-May-15 12:00
Received: 06-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W519134	AS	05/20/15 12:59	U
EPA 200.7	**Calcium**	12.2	mg/L	0.100	0.029		W519134	AS	05/20/15 12:59	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W519134	AS	05/20/15 12:59	U
EPA 200.7	**Magnesium**	3.81	mg/L	0.20	0.11		W519134	AS	05/20/15 12:59	
EPA 200.7	**Potassium**	67.7	mg/L	0.50	0.17		W519134	AS	05/20/15 12:59	
EPA 200.7	**Silica (SiO2)**	1.31	mg/L	0.17	0.12		W519134	AS	05/20/15 12:59	
EPA 200.7	**Sodium**	167	mg/L	0.50	0.05		W519134	AS	05/20/15 12:59	
EPA 200.8	**Antimony**	0.00072	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 07:06	J
EPA 200.8	**Arsenic**	0.00060	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 07:06	J
EPA 200.8	**Barium**	0.0363	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 07:06	
EPA 200.8	Beryllium	< 0.000048	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 07:06	U
EPA 200.8	**Boron**	0.115	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 07:06	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 07:06	U
EPA 200.8	**Chromium**	0.0050	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 07:06	
EPA 200.8	Cobalt	< 0.000054	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 07:06	U
EPA 200.8	**Copper**	0.00160	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 07:06	
EPA 200.8	**Lead**	0.00004	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 07:06	J
EPA 200.8	**Manganese**	0.0291	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 07:06	
EPA 200.8	**Molybdenum**	0.0198	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 07:06	
EPA 200.8	**Nickel**	0.0004	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 07:06	J
EPA 200.8	**Selenium**	0.0015	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 07:06	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 07:06	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 07:06	U
EPA 200.8	**Uranium**	0.00111	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 07:06	
EPA 200.8	**Vanadium**	0.0016	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 07:06	J
EPA 200.8	**Zinc**	0.0693	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 07:06	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W519148	STA	05/07/15 15:00	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	256	mg/L as CaCO3	1.0			W519142	DKS	05/08/15 10:04	Q19
SM 2320B	**Bicarbonate**	216	mg/L as CaCO3	1.0			W519142	DKS	05/08/15 10:04	Q19
SM 2320B	**Carbonate**	39.6	mg/L as CaCO3	1.0			W519142	DKS	05/08/15 10:04	Q19
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W519142	DKS	05/08/15 10:04	U,Q19
SM 2510 B	**Specific conductance**	1240	µmhos/cm	5.00			W519129	JDM	05/07/15 16:00	
SM 2540 C	**Total Diss. Solids**	622	mg/L	20			W519126	JDM	05/07/15 17:05	D1
SM 4500 H B	**pH @17.0°C**	8.86	pH Units				W519142	DKS	05/08/15 10:04	H5,Q19
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W519211	VRH	05/08/15 11:04	U,E9
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W519124	SM	05/06/15 11:35	H6,U
SM 4500-S-F	**Sulfide**	2.00	mg/L	2.00	0.78	2	W520075	SM	05/12/15 14:42	D1
SM 5310B	**Total Organic Carbon**	1.77	mg/L	1.00	0.24		W520157	SM	05/13/15 15:36	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Client Sample ID: **NSH-025-050515**
SVL Sample ID: **W5E0072-01 (Water)**

Sample Report Page 2 of 2

Sampled: 05-May-15 12:00
Received: 06-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	116	mg/L	5.00	1.40	25	W519170	MCE	05/07/15 13:29	D2,M3
EPA 300.0	**Fluoride**	3.27	mg/L	0.100	0.022		W519170	MCE	05/07/15 10:35	
EPA 300.0	Nitrate as N	< 0.008	mg/L	0.050	0.008		W519170	MCE	05/07/15 10:35	U,M1
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W519170	MCE	05/07/15 10:35	U,M1
EPA 300.0	**Sulfate as SO4**	148	mg/L	3.00	0.50	10	W519170	MCE	05/07/15 12:07	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 9.93 meq/L Anion Sum: 11.6 meq/L C/A Balance: -7.97 % Calculated TDS: 673 TDS/cTDS: 0.92 TDS/eC: 0.50

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W519134	20-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W519134	20-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W519134	20-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W519134	20-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W519134	20-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W519134	20-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W519134	20-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W519148	07-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.43		1.0	W519142	08-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.43		1.0	W519142	08-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W519142	08-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W519142	08-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W519126	07-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W519211	08-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W519124	06-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W520075	12-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W520157	13-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W519170	07-May-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W519170	07-May-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W519170	07-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W519170	07-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W519170	07-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.98	1.00	98.5	85 - 115	W519134	20-May-15	
EPA 200.7	Calcium	mg/L	20.3	20.0	101	85 - 115	W519134	20-May-15	
EPA 200.7	Iron	mg/L	9.93	10.0	99.3	85 - 115	W519134	20-May-15	
EPA 200.7	Magnesium	mg/L	20.2	20.0	101	85 - 115	W519134	20-May-15	
EPA 200.7	Potassium	mg/L	20.0	20.0	100	85 - 115	W519134	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.1	10.7	94.0	85 - 115	W519134	20-May-15	
EPA 200.7	Sodium	mg/L	18.9	19.0	99.6	85 - 115	W519134	20-May-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00528	0.00500	106	85 - 115	W519148	07-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	102	85 - 115	W519142	08-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	102	85 - 115	W519142	08-May-15	
SM 2510 B	Specific conductance	µmhos/cm	308	306	101	90 - 110	W519129	07-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.160	0.150	107	90 - 110	W519211	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.816	0.786	104	90 - 110	W519124	06-May-15	
SM 4500-S-F	Sulfide	mg/L	2.44	2.50	97.8	80 - 120	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.7	34.3	101	90 - 110	W520157	13-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.98	3.00	99.4	90 - 110	W519170	07-May-15	
EPA 300.0	Fluoride	mg/L	2.00	2.00	100	90 - 110	W519170	07-May-15	
EPA 300.0	Nitrate as N	mg/L	2.06	2.01	102	90 - 110	W519170	07-May-15	
EPA 300.0	Nitrite as N	mg/L	2.61	2.51	104	90 - 110	W519170	07-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.96	10.0	99.6	90 - 110	W519170	07-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	253	253	0.0	20	W519142	08-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	253	253	0.0	20	W519142	08-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W519142	08-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W519142	08-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	1240	1240	0.3	20	W519129	07-May-15	
SM 2540 C	Total Diss. Solids	mg/L	528	527	0.2	10	W519126	07-May-15	
SM 2540 C	Total Diss. Solids	mg/L	662	660	0.3	10	W519126	07-May-15	
SM 4500 H B	pH	pH Units	7.97	8.06	1.1	20	W519142	08-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.10	<0.036	1.00	110	70 - 130	W519134	20-May-15	
EPA 200.7	Aluminum	mg/L	2.67	1.53	1.00	114	70 - 130	W519134	20-May-15	
EPA 200.7	Calcium	mg/L	196	178	20.0	89.2	70 - 130	W519134	20-May-15	
EPA 200.7	Calcium	mg/L	435	418	20.0	84.3	70 - 130	W519134	20-May-15	M3
EPA 200.7	Iron	mg/L	10.2	<0.026	10.0	102	70 - 130	W519134	20-May-15	
EPA 200.7	Iron	mg/L	10.5	<0.026	10.0	105	70 - 130	W519134	20-May-15	
EPA 200.7	Magnesium	mg/L	40.8	20.2	20.0	103	70 - 130	W519134	20-May-15	
EPA 200.7	Magnesium	mg/L	99.7	78.6	20.0	106	70 - 130	W519134	20-May-15	
EPA 200.7	Potassium	mg/L	23.9	2.44	20.0	107	70 - 130	W519134	20-May-15	
EPA 200.7	Potassium	mg/L	28.1	5.67	20.0	112	70 - 130	W519134	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	29.1	18.0	10.7	104	70 - 130	W519134	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	33.1	21.8	10.7	106	70 - 130	W519134	20-May-15	
EPA 200.7	Sodium	mg/L	27.6	7.76	19.0	104	70 - 130	W519134	20-May-15	
EPA 200.7	Sodium	mg/L	62.0	42.2	19.0	104	70 - 130	W519134	20-May-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.0280	0.0268	0.00100	118	70 - 130	W519148	07-May-15	D2,M3
EPA 245.1	Mercury	mg/L	0.00109	<0.00004	0.00100	109	70 - 130	W519148	07-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.239	0.147	0.100	92.0	75 - 125	W519211	08-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.489	<0.0058	0.500	97.8	75 - 125	W519124	06-May-15	
SM 4500-S-F	Sulfide	mg/L	2.73	0.40	2.50	93.0	80 - 120	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	49.5	0.47	50.0	98.1	80 - 120	W520157	13-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	117	116	3.00	R > 4S	90 - 110	W519170	07-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.36	3.27	2.00	104	90 - 110	W519170	07-May-15	
EPA 300.0	Nitrate as N	mg/L	2.22	<0.008	2.00	111	90 - 110	W519170	07-May-15	M1
EPA 300.0	Nitrite as N	mg/L	2.64	<0.014	2.00	132	90 - 110	W519170	07-May-15	M1
EPA 300.0	Sulfate as SO4	mg/L	158	148	10.0	96.7	90 - 110	W519170	07-May-15	D2

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.08	1.10	1.00	108	1.5	20	W519134	20-May-15	
EPA 200.7	Calcium	mg/L	198	196	20.0	96.1	0.7	20	W519134	20-May-15	
EPA 200.7	Iron	mg/L	9.96	10.2	10.0	99.6	2.4	20	W519134	20-May-15	
EPA 200.7	Magnesium	mg/L	40.7	40.8	20.0	103	0.2	20	W519134	20-May-15	
EPA 200.7	Potassium	mg/L	23.3	23.9	20.0	105	2.2	20	W519134	20-May-15	
EPA 200.7	Silica (SiO2)	mg/L	28.8	29.1	10.7	101	1.0	20	W519134	20-May-15	
EPA 200.7	Sodium	mg/L	27.1	27.6	19.0	102	1.6	20	W519134	20-May-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.0279	0.0280	0.00100	108	0.4	20	W519148	07-May-15	D2,M3
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.240	0.239	0.100	93.0	0.4	20	W519211	08-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.490	0.489	0.500	98.0	0.2	20	W519124	06-May-15	
SM 4500-S-F	Sulfide	mg/L	2.85	2.73	2.50	97.8	4.3	20	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	49.5	50.0	101	3.0	20	W520157	13-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0072**
Reported: 20-May-15 14:12

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	117	117	3.00	R > 4S	0.4	20	W519170	07-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.35	5.36	2.00	104	0.1	20	W519170	07-May-15	
EPA 300.0	Nitrate as N	mg/L	2.16	2.22	2.00	108	2.5	20	W519170	07-May-15	
EPA 300.0	Nitrite as N	mg/L	2.62	2.64	2.00	131	0.7	20	W519170	07-May-15	M1
EPA 300.0	Sulfate as SO4	mg/L	158	158	10.0	99.7	0.2	20	W519170	07-May-15	D2

Notes and Definitions

D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
E9	The client has requested a reporting limit for this analyte that is lower than our established reporting limit. The concentration reported is below our established reporting limit and is therefore estimated, as it is outside of the calibration range.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q19	Sample is high in sediment. Sample was homogenized, an aliquot was poured off and allowed to settle, then the water portion was decanted and analyzed.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	NSH-007-050615	**Sampling Time**	8:30 AM			
Matrix	Water	**Sample Location**	W5E0115-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Acetone	7.01	ug/L	0.5	2.5	5/15/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015 11:25 AM
Client Sample ID	NSH-007-050615	**Sampling Time**	8:30 AM		
Matrix	Water	**Sample Location**	W5E0115-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015 11:25 AM
Client Sample ID	NSH-007-050615	**Sampling Time**	8:30 AM		
Matrix	Water	**Sample Location**	W5E0115-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150508024-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.8	70-130
Bromofluorobenzene	EPA 524.3	92.8	70-130
Toluene-d8	EPA 524.3	101.0	70-130

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	NSH-007-050615 DUPLICATE	**Sampling Time**	8:30 AM			
Matrix	Water	**Sample Location**	W5E0115-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Acetone	6.69	ug/L	0.5	2.5	5/15/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	NSH-007-050615 DUPLICATE	**Sampling Time**	8:30 AM			
Matrix	Water	**Sample Location**	W5E0115-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-001A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	NSH-007-050615 DUPLICATE	**Sampling Time**	8:30 AM			
Matrix	Water	**Sample Location**	W5E0115-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150508024-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.2	70-130
Bromofluorobenzene	EPA 524.3	94.0	70-130
Toluene-d8	EPA 524.3	98.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0115-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Acetone	24.6	ug/L	0.5	2.5	5/15/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015 11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0115-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-002	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0115-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150508024-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.8	70-130
Bromofluorobenzene	EPA 524.3	90.8	70-130
Toluene-d8	EPA 524.3	97.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	SAMPLE MAKE-UP	**Sampling Time**	9:00 AM			
Matrix	Water	**Sample Location**	W5E0115-03			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Acetone	2.89	ug/L	0.5	2.5	5/15/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015 11:25 AM
Client Sample ID	SAMPLE MAKE-UP	**Sampling Time**	9:00 AM		
Matrix	Water	**Sample Location**	W5E0115-03		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	SAMPLE MAKE-UP	**Sampling Time**	9:00 AM			
Matrix	Water	**Sample Location**	W5E0115-03			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Toluene	2.55	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150508024-003

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.0	70-130
Bromofluorobenzene	EPA 524.3	94.4	70-130
Toluene-d8	EPA 524.3	98.6	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	SAMPLE MAKE-UP DUPLICATE	**Sampling Time**	9:00 AM			
Matrix	Water	**Sample Location**	W5E0115-03			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Acetone	3.88	ug/L	0.5	2.5	5/19/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	SAMPLE MAKE-UP DUPLICATE	**Sampling Time**	9:00 AM			
Matrix	Water	**Sample Location**	W5E0115-03			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Sample Number	150508024-003A	**Sampling Date**	5/6/2015	**Date/Time Received**	5/8/2015	11:25 AM
Client Sample ID	SAMPLE MAKE-UP DUPLICATE	**Sampling Time**	9:00 AM			
Matrix	Water	**Sample Location**	W5E0115-03			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Toluene	2.47	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150508024-003A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.2	70-130
Bromofluorobenzene	EPA 524.3	92.0	70-130
Toluene-d8	EPA 524.3	102.0	70-130

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.86	ug/L	10	98.6	70-130	5/15/2015	5/15/2015
Toluene	10.4	ug/L	10	104.0	70-130	5/15/2015	5/15/2015
Tetrachloroethene	9.88	ug/L	10	98.8	70-130	5/15/2015	5/15/2015
Ethylbenzene	9.95	ug/L	10	99.5	70-130	5/15/2015	5/15/2015
Chlorobenzene	9.75	ug/L	10	97.5	70-130	5/15/2015	5/15/2015
Benzene	10.2	ug/L	10	102.0	70-130	5/15/2015	5/15/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	70-130	5/15/2015	5/15/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150513013-002	Trichloroethene	ND	8.60	ug/L	10	86.0	70-130	5/15/2015	5/15/2015
150513013-002	Toluene	ND	11.0	ug/L	10	110.0	70-130	5/15/2015	5/15/2015
150513013-002	Tetrachloroethene	ND	8.00	ug/L	10	80.0	70-130	5/15/2015	5/15/2015
150513013-002	Ethylbenzene	ND	10.5	ug/L	10	105.0	70-130	5/15/2015	5/15/2015
150513013-002	Chlorobenzene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015
150513013-002	Benzene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015
150513013-002	1,1-Dichloroethene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	8.70	ug/L	10	87.0	1.2	0-30	5/15/2015	5/15/2015
Toluene	11.1	ug/L	10	111.0	0.9	0-30	5/15/2015	5/15/2015
Tetrachloroethene	7.50	ug/L	10	75.0	6.5	0-30	5/15/2015	5/15/2015
Ethylbenzene	9.47	ug/L	10	94.7	10.3	0-30	5/15/2015	5/15/2015
Chlorobenzene	9.49	ug/L	10	94.9	6.2	0-30	5/15/2015	5/15/2015
Benzene	10.2	ug/L	10	102.0	1.0	0-30	5/15/2015	5/15/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	2.0	0-30	5/15/2015	5/15/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-dichloropropene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
2-Chlorotoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
4-Chlorotoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
Acetone	ND	ug/L	2.5	5/15/2015	5/15/2015
Benzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromochloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromodichloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromoform	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromomethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/15/2015	5/15/2015
Chlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloroform	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Dibromochloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Dibromomethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Ethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150508024
Project Name: SVL #W5E0115

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/15/2015	5/15/2015
Isopropylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Methylene chloride	ND	ug/L	0.5	5/15/2015	5/15/2015
Naphthalene	ND	ug/L	0.5	5/15/2015	5/15/2015
n-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
n-Propylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
p-isopropyltoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
sec-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Styrene	ND	ug/L	0.5	5/15/2015	5/15/2015
tert-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Tetrachloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Toluene	ND	ug/L	0.5	5/15/2015	5/15/2015
Total Xylene	ND	ug/L	0.5	5/15/2015	5/15/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Trichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Vinyl Chloride	ND	ug/L	0.5	5/15/2015	5/15/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150508024
Order Date: 5/8/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0115
Comment:

Sample #: 150508024-001 **Customer Sample #:** NSH-007-050615

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/6/2015
Quantity: 3 **Date Received:** 5/8/2015 11:25:00 AM **Time Collected:** 8:30 AM
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/20/2015	***Normal (~10 Days)***

Sample #: 150508024-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/6/2015
Quantity: 1 **Date Received:** 5/8/2015 11:25:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/20/2015	***Normal (~10 Days)***

Sample #: 150508024-003 **Customer Sample #:** SAMPLE MAKE-UP

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/6/2015
Quantity: 3 **Date Received:** 5/8/2015 11:25:00 AM **Time Collected:** 9:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/20/2015	***Normal (~10 Days)***

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150508024
Order Date: 5/8/2015

Contact Name: LAUREN CANDREVA

Project Name: SVL #W5E0115

Comment:

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	2.3
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0115

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 4.6

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602 - 760 - 2450
FAX Number:
E-mail:

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520 - 368 - 1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and o
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) $C_6H_8O_6$	VOCs (524.3)	Rush Instructions (Days)	Comments
1	NSH-007-050615	5/6/15	0830	KF	2	3							X	X		
2																
3	TRIP BLANK					1										
4																
5	SAMPLE MAKE-UP	5/6/15	0900	KF	2	3							X	X		
6																
7																SHIPPED UPS OVERNIGHT
8																1Z 9X8 989 23 1001
9																274 8
10																

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	5/6/15	14:00	[signature]	5-7-15	10:00
[signature]	5-7-15	1312			

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

Monday, June 08, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505248
Project Name:
Project Number: 5E0145

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/14/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505248

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505248
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0145
Client PO Number: 15303

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-028-050715	1505248-1		WATER	07-May-15	10:00

ALS

1505248

SVL ANALYTICAL

CHAIN OF CUSTODY RECORD

Page 1 of 1

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SE0145

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15303

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross a/b 900.0; RAD 226/228 903.1/904; U 234/235/238 ASTM D3972	Rush Instructions (Days)	Comments
1	NSH-028-050715 (1)	5/7/15	1000	KF	2	3			X					XXX		Call Chris Meyer with Questions
2																
3																
4																
5																
6																
7																
8																
9																
10																

Relinquished by: A Jacobson	Date: 5-11-15	Time: 1147	Received by: Eric Peterson	Date: 5/14/15	Time: ecp 1015
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1505248

Project Manager: JRK Initials: ECP Date: 5/14/15

1.	Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2.	Are custody seals on shipping containers intact?	(NONE)	YES	NO
3.	Are Custody seals on sample containers intact?	(NONE)	YES	NO
4.	Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5.	Are the COC and bottle labels complete and legible?		(YES)	NO
6.	Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7.	Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8.	Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9.	Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10.	Is there sufficient sample for the requested analyses?		(YES)	NO
11.	Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12.	Are all samples within holding times for the requested analyses?		(YES)	NO
13.	Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	(N/A)	YES	NO
15.	Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____heavy	N/A	YES	(NO)
16.	Were the samples shipped on ice?		YES	(NO)
17.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	(NO)

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	0							
DOT Survey/ Acceptance Information — External µR/hr reading:	12							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / (NA)** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-14-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

DWT: 15,11,16

12
-0

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4504 2858

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31 63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited. RRD R 0215

Client: SVL Analytical
Date: *08-Jun-15*
Project: 5E0145
Work Order: 1505248
Sample ID: NSH-028-050715
Lab ID: 1505248-1
Legal Location:
Matrix: WATER
Collection Date: 5/7/2015 10:00
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **6/1/2015**	PrepBy: **DKL**
GROSS ALPHA	**5.3 (+/- 1.9)**		**2.1**	**pCi/l**	NA	6/2/2015 13:03
GROSS BETA	**21.8 (+/- 4.1)**		**2.8**	**pCi/l**	NA	6/2/2015 13:03
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **6/2/2015**	PrepBy: **CAS**
Tracer: U-232	*85.1*		*30-110*	*%REC*	DL = NA	6/5/2015 07:41
U-234	**0.93 (+/- 0.25)**		**0.12**	**pCi/l**	NA	6/5/2015 07:41
U-235	ND (+/- 0.051)	U	0.066	pCi/l	NA	6/5/2015 07:41
U-238	**0.89 (+/- 0.24)**		**0.1**	**pCi/l**	NA	6/5/2015 07:41
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **5/21/2015**	PrepBy: **PJW**
Ra-226	**1.51 (+/- 0.46)**		**0.09**	**pCi/l**	NA	6/2/2015 13:04
Carr: BARIUM	*89.2*		*40-110*	*%REC*	DL = NA	6/2/2015 13:04
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **5/14/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.22)	U	0.5	pCi/l	NA	5/20/2015 11:52
Carr: BARIUM	*89.2*		*40-110*	*%REC*	DL = NA	5/20/2015 11:52

Client:	SVL Analytical	**Date:**	*08-Jun-15*
Project:	5E0145	**Work Order:**	1505248
Sample ID:	NSH-028-050715	**Lab ID:**	1505248-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/7/2015 10:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505248
Project: 5E0145

Date: *6/8/2015 2:25:5*

QC BATCH REPORT

Batch ID: **RE150521-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150521-1** Units: **pCi/l** Analysis Date: **6/2/2015 13:04**
Client ID: Run ID: **RE150521-1A** Prep Date: **5/21/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	31.3 (+/- 7.9)	0.1	30.71		102	67-120					P
Carr: BARIUM	29880		33200		90	40-110					

LCSD Sample ID: **RE150521-1** Units: **pCi/l** Analysis Date: **6/2/2015 13:04**
Client ID: Run ID: **RE150521-1A** Prep Date: **5/21/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	29.4 (+/- 7.4)	0.2	30.71		95.7	67-120		31.3	0.2	2.1	P
Carr: BARIUM	30410		33200		91.6	40-110		29880			

MB Sample ID: **RE150521-1** Units: **pCi/l** Analysis Date: **6/2/2015 13:04**
Client ID: Run ID: **RE150521-1A** Prep Date: **5/21/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.088									U
Carr: BARIUM	30580		33230		92	40-110					

The following samples were analyzed in this batch: 1505248-1

Client: SVL Analytical
Work Order: 1505248
Project: 5E0145

QC BATCH REPORT

Batch ID: **AS150602-1-4** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.94 (+/- 0.88)	0.05	4.416		112	82-122					P
U-238	4.62 (+/- 0.82)	0.04	4.585		101	78-126					P
Tracer: U-232	3.5	0.06	4.165		84.1	30-110					

LCSD Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/5/2015 07:44**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	5.05 (+/- 0.9)	0.07	4.416		114	82-122		4.94	0.09	2.1	P
U-238	4.86 (+/- 0.87)	0.04	4.585		106	78-126		4.62	0.2	2.1	P
Tracer: U-232	3.25	0.08	4.165		78.1	30-110		3.5			

MB Sample ID: **AS150602-1** Units: **pCi/l** Analysis Date: **6/6/2015 11:24**
Client ID: Run ID: **AS150602-1U** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.02									U
U-235	ND	0.027									U
U-238	ND	0.03									U
Tracer: U-232	2.96	0.03	4.164		71.1	30-110					

The following samples were analyzed in this batch: 1505248-1

Client: SVL Analytical
Work Order: 1505248
Project: 5E0145

QC BATCH REPORT

Batch ID: **AB150601-1-5** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150601-1** Units: **pCi/l** Analysis Date: **6/2/2015 15:37**

Client ID: Run ID: **AB150601-1A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	181 (+/- 34)	7	224.2		80.7	70-130					P,M3
GROSS BETA	206 (+/- 36)	11	203.6		101	70-130					P,M3

MB Sample ID: **AB150601-1** Units: **pCi/l** Analysis Date: **6/2/2015 15:46**

Client ID: Run ID: **AB150601-1A** Prep Date: **6/1/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.73									U
GROSS BETA	ND	1.1									U

The following samples were analyzed in this batch: 1505248-1

Client: SVL Analytical
Work Order: 1505248
Project: 5E0145

QC BATCH REPORT

Batch ID: **RA150514-3-1** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150514-3** Units: **pCi/l** Analysis Date: **5/20/2015 11:52**
Client ID: Run ID: **RA150514-3A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7.7 (+/- 1.8)	0.5	7.776		98.6	70-130					P
Carr: BARIUM	29880		33200		90	40-110					

LCSD Sample ID: **RA150514-3** Units: **pCi/l** Analysis Date: **5/20/2015 11:52**
Client ID: Run ID: **RA150514-3A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.3 (+/- 2)	0.5	7.776		107	70-130		7.7	0.2	2.1	P
Carr: BARIUM	30410		33200		91.6	40-110		29880			

MB Sample ID: **RA150514-3** Units: **pCi/l** Analysis Date: **5/20/2015 11:52**
Client ID: Run ID: **RA150514-3A** Prep Date: **5/14/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.49									U
Carr: BARIUM	30580		33230		92	40-110					

The following samples were analyzed in this batch: 1505248-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715	**Sampling Time**	10:00 AM		
Matrix	Water	**Sample Location**	W5E0145-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	50	5/15/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715	**Sampling Time**	10:00 AM		
Matrix	Water	**Sample Location**	W5E0145-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715	**Sampling Time**	10:00 AM		
Matrix	Water	**Sample Location**	W5E0145-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Toluene	339	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	10	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150512052-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.4	70-130
Bromofluorobenzene	EPA 524.3	90.6	70-130
Toluene-d8	EPA 524.3	98.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001A	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715 DUPLICATE	**Sampling Time**	10:00 AM		
Matrix	Water	**Sample Location**	W5E0145-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	50	5/16/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001A	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715 DUPLICATE	**Sampling Time**	10:00 AM		
Matrix	Water	**Sample Location**	W5E0145-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001A	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015	10:45 AM
Client Sample ID	NSH-028-050715 DUPLICATE	**Sampling Time**	10:00 AM			
Matrix	Water	**Sample Location**	W5E0145-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Toluene	351	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	10	5/16/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150512052-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.0	70-130
Bromofluorobenzene	EPA 524.3	91.4	70-130
Toluene-d8	EPA 524.3	99.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-002	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0145-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Acetone	40.1	ug/L	0.5	2.5	5/15/2015	SAT	EPA 524.3	E1
Acrylonitrile	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-002	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0145-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-002	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0145-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/15/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150512052-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	102.6	70-130
Bromofluorobenzene	EPA 524.3	93.0	70-130
Toluene-d8	EPA 524.3	97.4	70-130

Authorized Signature

John Coddington, Lab Manager

E1	Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	9.86	ug/L	10	98.6	70-130	5/15/2015	5/15/2015
Toluene	10.4	ug/L	10	104.0	70-130	5/15/2015	5/15/2015
Tetrachloroethene	9.88	ug/L	10	98.8	70-130	5/15/2015	5/15/2015
Ethylbenzene	9.95	ug/L	10	99.5	70-130	5/15/2015	5/15/2015
Chlorobenzene	9.75	ug/L	10	97.5	70-130	5/15/2015	5/15/2015
Benzene	10.2	ug/L	10	102.0	70-130	5/15/2015	5/15/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	70-130	5/15/2015	5/15/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150513013-002	Trichloroethene	ND	8.60	ug/L	10	86.0	70-130	5/15/2015	5/15/2015
150513013-002	Toluene	ND	11.0	ug/L	10	110.0	70-130	5/15/2015	5/15/2015
150513013-002	Tetrachloroethene	ND	8.00	ug/L	10	80.0	70-130	5/15/2015	5/15/2015
150513013-002	Ethylbenzene	ND	10.5	ug/L	10	105.0	70-130	5/15/2015	5/15/2015
150513013-002	Chlorobenzene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015
150513013-002	Benzene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015
150513013-002	1,1-Dichloroethene	ND	10.1	ug/L	10	101.0	70-130	5/15/2015	5/15/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	8.70	ug/L	10	87.0	1.2	0-30	5/15/2015	5/15/2015
Toluene	11.1	ug/L	10	111.0	0.9	0-30	5/15/2015	5/15/2015
Tetrachloroethene	7.50	ug/L	10	75.0	6.5	0-30	5/15/2015	5/15/2015
Ethylbenzene	9.47	ug/L	10	94.7	10.3	0-30	5/15/2015	5/15/2015
Chlorobenzene	9.49	ug/L	10	94.9	6.2	0-30	5/15/2015	5/15/2015
Benzene	10.2	ug/L	10	102.0	1.0	0-30	5/15/2015	5/15/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	2.0	0-30	5/15/2015	5/15/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015

Comments:

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Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,1-dichloropropene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/15/2015	5/15/2015
2-Chlorotoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
4-Chlorotoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
Acetone	ND	ug/L	2.5	5/15/2015	5/15/2015
Benzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromochloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromodichloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromoform	ND	ug/L	0.5	5/15/2015	5/15/2015
Bromomethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/15/2015	5/15/2015
Chlorobenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloroethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloroform	ND	ug/L	0.5	5/15/2015	5/15/2015
Chloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Dibromochloromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Dibromomethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Ethylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/15/2015	5/15/2015
Isopropylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Methylene chloride	ND	ug/L	0.5	5/15/2015	5/15/2015
Naphthalene	ND	ug/L	0.5	5/15/2015	5/15/2015
n-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
n-Propylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
p-isopropyltoluene	ND	ug/L	0.5	5/15/2015	5/15/2015
sec-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Styrene	ND	ug/L	0.5	5/15/2015	5/15/2015
tert-Butylbenzene	ND	ug/L	0.5	5/15/2015	5/15/2015
Tetrachloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Toluene	ND	ug/L	0.5	5/15/2015	5/15/2015
Total Xylene	ND	ug/L	0.5	5/15/2015	5/15/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Trichloroethene	ND	ug/L	0.5	5/15/2015	5/15/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/15/2015	5/15/2015
Vinyl Chloride	ND	ug/L	0.5	5/15/2015	5/15/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Sample Number	150512052-001	**Sampling Date**	5/7/2015	**Date/Time Received**	5/12/2015 10:45 AM
Client Sample ID	NSH-028-050715	**Sampling Time**	10:00 AM	**Extraction Date**	5/13/15
Matrix	Water	**Sample Location**	W5E0145-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Naphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Phenanthrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U

Surrogate Data

Sample Number 150512052-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	54.8	10-125

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.94	ug/L	5	78.8	60-137	5/13/2015	5/22/2015
Acenaphthene	3.49	ug/L	5	69.8	58-118	5/13/2015	5/22/2015
Acenaphthylene	3.33	ug/L	5	66.6	52-124	5/13/2015	5/22/2015
Anthracene	3.70	ug/L	5	74.0	59-122	5/13/2015	5/22/2015
Benzo(ghi)perylene	3.77	ug/L	5	75.4	50-136	5/13/2015	5/22/2015
Benzo[a]anthracene	4.64	ug/L	5	92.8	71-124	5/13/2015	5/22/2015
Benzo[a]pyrene	3.93	ug/L	5	78.6	53-133	5/13/2015	5/22/2015
2-Methylnaphthalene	4.78	ug/L	5	95.6	56-128	5/13/2015	5/22/2015
Benzo[k]fluoranthene	3.94	ug/L	5	78.8	50-143	5/13/2015	5/22/2015
Pyrene	3.60	ug/L	5	72.0	53-130	5/13/2015	5/22/2015
Dibenz[a,h]anthracene	3.87	ug/L	5	77.4	52-140	5/13/2015	5/22/2015
Fluoranthene	3.67	ug/L	5	73.4	57-134	5/13/2015	5/22/2015
Fluorene	4.00	ug/L	5	80.0	61-123	5/13/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.94	ug/L	5	78.8	51-137	5/13/2015	5/22/2015
Naphthalene	3.23	ug/L	5	64.6	53-120	5/13/2015	5/22/2015
Phenanthrene	3.83	ug/L	5	76.6	60-124	5/13/2015	5/22/2015
Benzo[b]fluoranthene	4.30	ug/L	5	86.0	60-139	5/13/2015	5/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.99	ug/L	5	79.8	1.3	0-50	5/13/2015	5/22/2015
Acenaphthene	3.53	ug/L	5	70.6	1.1	0-50	5/13/2015	5/22/2015
Acenaphthylene	3.33	ug/L	5	66.6	0.0	0-50	5/13/2015	5/22/2015
Anthracene	3.70	ug/L	5	74.0	0.0	0-50	5/13/2015	5/22/2015
Benzo(ghi)perylene	3.79	ug/L	5	75.8	0.5	0-50	5/13/2015	5/22/2015
Benzo[a]anthracene	4.71	ug/L	5	94.2	1.5	0-50	5/13/2015	5/22/2015
Benzo[a]pyrene	3.92	ug/L	5	78.4	0.3	0-50	5/13/2015	5/22/2015
2-Methylnaphthalene	4.74	ug/L	5	94.8	0.8	0-50	5/13/2015	5/22/2015
Benzo[k]fluoranthene	3.95	ug/L	5	79.0	0.3	0-50	5/13/2015	5/22/2015
Pyrene	3.68	ug/L	5	73.6	2.2	0-50	5/13/2015	5/22/2015
Dibenz[a,h]anthracene	3.87	ug/L	5	77.4	0.0	0-50	5/13/2015	5/22/2015
Fluoranthene	3.74	ug/L	5	74.8	1.9	0-50	5/13/2015	5/22/2015
Fluorene	4.10	ug/L	5	82.0	2.5	0-50	5/13/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.94	ug/L	5	78.8	0.0	0-50	5/13/2015	5/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150512052
Project Name: SVL #W5E0145

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.16	ug/L	5	63.2	2.2	0-50	5/13/2015	5/22/2015
Phenanthrene	3.86	ug/L	5	77.2	0.8	0-50	5/13/2015	5/22/2015
Benzo[b]fluoranthene	4.40	ug/L	5	88.0	2.3	0-50	5/13/2015	5/22/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/13/2015	5/22/2015
Acenaphthene	ND	ug/L	0.01	5/13/2015	5/22/2015
Acenaphthylene	ND	ug/L	0.01	5/13/2015	5/22/2015
Anthracene	ND	ug/L	0.01	5/13/2015	5/22/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/13/2015	5/22/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/13/2015	5/22/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/13/2015	5/22/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/13/2015	5/22/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/13/2015	5/22/2015
Chrysene	ND	ug/L	0.01	5/13/2015	5/22/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/13/2015	5/22/2015
Fluoranthene	ND	ug/L	0.01	5/13/2015	5/22/2015
Fluorene	ND	ug/L	0.01	5/13/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/13/2015	5/22/2015
Naphthalene	ND	ug/L	0.01	5/13/2015	5/22/2015
Phenanthrene	ND	ug/L	0.01	5/13/2015	5/22/2015
Pyrene	ND	ug/L	0.01	5/13/2015	5/22/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150512052
Order Date: 5/12/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0145
Comment:

Sample #: 150512052-001 **Customer Sample #:** NSH-028-050715

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/7/2015
Quantity: 4 **Date Received:** 5/12/2015 10:45:00 AM **Time Collected:** 10:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/22/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/22/2015	***Normal (~10 Days)***

Sample #: 150512052-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/7/2015
Quantity: 1 **Date Received:** 5/12/2015 10:45:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/22/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.1 / 3.0
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0145

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 3.8

Page ____ of ____

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N 44TH ST #330
PHOENIX AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAH	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
* 1	NSH-028-050715	5/7/15	1000	KF	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		METAL/SILICA SAMPLE WAS FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER CAPSULE, PRESERVED WITH HNO_3
2																									
3	TRIP BLANK					1																X			
4																									
5																									
6																									SHIPPED UPS OVERNIGHT
7																									1Z 9X8 989 23
8																									1001 273 9
9																									
10																									

Relinquished by: [signature]	Date: 5/7/15	Time: 14:00	Received by: [signature]	Date: 5-8-15	Time: 10:10
Relinquished by: [signature]	Date: 5-11-15	Time: 1340	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

* The Amber VOA's for TOC Have a NAOH Label and a preserved with H_2SO_4 sticker - [signature] 5-8-15

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-028-050715	W5E0145-01	Ground Water	07-May-15 10:00	KF	08-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Client Sample ID: **NSH-028-050715**
SVL Sample ID: **W5E0145-01 (Ground Water)**

Sampled: 07-May-15 10:00
Received: 08-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W520002	AS	05/24/15 10:39	U
EPA 200.7	**Calcium**	25.6	mg/L	0.100	0.029		W520002	AS	05/24/15 10:39	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W520002	AS	05/24/15 10:39	U
EPA 200.7	**Magnesium**	19.2	mg/L	0.20	0.11		W520002	AS	05/24/15 10:39	
EPA 200.7	**Potassium**	2.31	mg/L	0.50	0.17		W520002	AS	05/24/15 10:39	
EPA 200.7	**Silica (SiO2)**	47.9	mg/L	0.17	0.12		W520002	AS	05/24/15 10:39	
EPA 200.7	**Sodium**	23.8	mg/L	0.50	0.05		W520002	AS	05/24/15 10:39	
EPA 200.8	**Antimony**	0.00031	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 07:08	J
EPA 200.8	**Arsenic**	0.00148	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 07:08	J
EPA 200.8	**Barium**	0.0196	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 07:08	
EPA 200.8	Beryllium	< 0.000048	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 07:08	U
EPA 200.8	**Boron**	0.0507	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 07:08	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 07:08	U
EPA 200.8	**Chromium**	0.0039	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 07:08	J
EPA 200.8	**Copper**	0.00204	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Lead**	0.00016	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 07:08	J
EPA 200.8	**Manganese**	0.00632	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Molybdenum**	0.0578	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Nickel**	0.0009	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 07:08	J
EPA 200.8	**Selenium**	0.0024	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 07:08	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 07:08	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 07:08	U
EPA 200.8	**Uranium**	0.00246	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Vanadium**	0.0037	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 07:08	
EPA 200.8	**Zinc**	0.353	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 07:08	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W520041	STA	05/13/15 13:41	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	135	mg/L as CaCO3	1.0			W519221	DKS	05/12/15 10:11	
SM 2320B	**Bicarbonate**	135	mg/L as CaCO3	1.0			W519221	DKS	05/12/15 10:11	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W519221	DKS	05/12/15 10:11	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W519221	DKS	05/12/15 10:11	U
SM 2510 B	**Specific conductance**	399	µmhos/cm	5.00			W519231	JDM	05/11/15 12:10	
SM 2540 C	**Total Diss. Solids**	247	mg/L	10			W519229	RS	05/12/15 08:25	
SM 4500 H B	**pH @21.0°C**	8.08	pH Units				W519221	DKS	05/12/15 10:11	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W521081	MAD	05/21/15 11:24	U
SM 4500-P-E	**Orthophosphate as P**	0.013	mg/L	0.010	0.006		W519239	SM	05/08/15 16:08	Q14
SM 4500-S-F	**Sulfide**	0.40	mg/L	1.00	0.39		W520075	SM	05/12/15 14:42	J
SM 5310B	**Total Organic Carbon**	0.41	mg/L	1.00	0.24		W520157	SM	05/13/15 16:02	J

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AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Client Sample ID: **NSH-028-050715**
SVL Sample ID: **W5E0145-01 (Ground Water)**

Sampled: 07-May-15 10:00
Received: 08-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	23.4	mg/L	2.00	0.56	10	W519228	MCE	05/08/15 16:47	D2
EPA 300.0	**Fluoride**	4.05	mg/L	0.100	0.022		W519228	MCE	05/08/15 16:35	
EPA 300.0	**Nitrate as N**	1.04	mg/L	0.050	0.008		W519228	MCE	05/08/15 16:35	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W519228	MCE	05/08/15 16:35	U
EPA 300.0	**Sulfate as SO4**	15.6	mg/L	0.30	0.05		W519228	MCE	05/08/15 16:35	

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.97 meq/L Anion Sum: 3.97 meq/L C/A Balance: -0.05 % Calculated TDS: 248 TDS/cTDS: 1.00 TDS/eC: 0.62

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W520002	24-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W520002	24-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W520002	24-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W520002	24-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W520002	24-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W520002	24-May-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W520002	24-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W520041	13-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.28		1.0	W519221	12-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.28		1.0	W519221	12-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W519221	12-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W519221	12-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W519229	12-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W521081	21-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W519239	08-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W520075	12-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W520157	13-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W519228	08-May-15	U
EPA 300.0	Fluoride	mg/L	0.023	0.022	0.100	W519228	08-May-15	J
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W519228	08-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W519228	08-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W519228	08-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.10	1.00	110	85 - 115	W520002	24-May-15	
EPA 200.7	Calcium	mg/L	21.0	20.0	105	85 - 115	W520002	24-May-15	
EPA 200.7	Iron	mg/L	10.5	10.0	105	85 - 115	W520002	24-May-15	
EPA 200.7	Magnesium	mg/L	20.7	20.0	104	85 - 115	W520002	24-May-15	
EPA 200.7	Potassium	mg/L	21.1	20.0	106	85 - 115	W520002	24-May-15	
EPA 200.7	Silica (SiO2)	mg/L	11.1	10.7	104	85 - 115	W520002	24-May-15	
EPA 200.7	Sodium	mg/L	19.7	19.0	104	85 - 115	W520002	24-May-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00501	0.00500	100	85 - 115	W520041	13-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	102	99.3	102	85 - 115	W519221	12-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	102	99.3	102	85 - 115	W519221	12-May-15	
SM 2510 B	Specific conductance	µmhos/cm	302	306	98.7	90 - 110	W519231	11-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.143	0.150	95.3	90 - 110	W521081	21-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.812	0.786	103	90 - 110	W519239	08-May-15	
SM 4500-S-F	Sulfide	mg/L	2.44	2.50	97.8	80 - 120	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.7	34.3	101	90 - 110	W520157	13-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	3.08	3.00	103	90 - 110	W519228	08-May-15	
EPA 300.0	Fluoride	mg/L	1.96	2.00	97.9	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrate as N	mg/L	1.93	2.01	96.2	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrite as N	mg/L	2.49	2.51	99.3	90 - 110	W519228	08-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.71	10.0	97.1	90 - 110	W519228	08-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	112	135	18.9	20	W519221	12-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	112	135	18.9	20	W519221	12-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W519221	12-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W519221	12-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	402	399	0.7	20	W519231	11-May-15	
SM 2540 C	Total Diss. Solids	mg/L	276	267	3.3	10	W519229	12-May-15	
SM 2540 C	Total Diss. Solids	mg/L	281	273	2.9	10	W519229	12-May-15	
SM 4500 H B	pH	pH Units	8.10	8.08	0.2	20	W519221	12-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.18	0.04	1.00	114	70 - 130	W520002	24-May-15	
EPA 200.7	Calcium	mg/L	193	173	20.0	100	70 - 130	W520002	24-May-15	M3
EPA 200.7	Iron	mg/L	68.6	59.0	10.0	95.9	70 - 130	W520002	24-May-15	
EPA 200.7	Magnesium	mg/L	145	123	20.0	109	70 - 130	W520002	24-May-15	M3
EPA 200.7	Potassium	mg/L	36.1	14.4	20.0	108	70 - 130	W520002	24-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.1	48.0	10.7	103	70 - 130	W520002	24-May-15	
EPA 200.7	Sodium	mg/L	64.5	44.0	19.0	108	70 - 130	W520002	24-May-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W520041	13-May-15	
EPA 245.1	Mercury	mg/L	0.00094	<0.00004	0.00100	93.9	70 - 130	W520041	13-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0970	<0.0025	0.100	97.0	75 - 125	W521081	21-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.493	0.013	0.500	96.1	75 - 125	W519239	08-May-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.73	0.40	2.50	93.0	80 - 120	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	49.5	0.47	50.0	98.1	80 - 120	W520157	13-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	15.0	12.2	3.00	92.5	90 - 110	W519228	08-May-15	D2,M3
EPA 300.0	Chloride	mg/L	15.5	12.3	3.00	106	90 - 110	W519228	08-May-15	D2,M3

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)										
EPA 300.0	Fluoride	mg/L	2.49	0.584	2.00	95.3	90 - 110	W519228	08-May-15	
EPA 300.0	Fluoride	mg/L	2.51	0.569	2.00	96.9	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrate as N	mg/L	2.49	0.465	2.00	101	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrate as N	mg/L	3.42	1.37	2.00	103	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrite as N	mg/L	2.18	<0.014	2.00	109	90 - 110	W519228	08-May-15	
EPA 300.0	Nitrite as N	mg/L	2.16	<0.014	2.00	108	90 - 110	W519228	08-May-15	
EPA 300.0	Sulfate as SO4	mg/L	38.5	27.9	10.0	106	90 - 110	W519228	08-May-15	
EPA 300.0	Sulfate as SO4	mg/L	23.5	13.0	10.0	105	90 - 110	W519228	08-May-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.18	1.18	1.00	114	0.3	20	W520002	24-May-15	
EPA 200.7	Calcium	mg/L	193	193	20.0	99.6	0.0	20	W520002	24-May-15	M3
EPA 200.7	Iron	mg/L	68.5	68.6	10.0	95.1	0.1	20	W520002	24-May-15	
EPA 200.7	Magnesium	mg/L	145	145	20.0	108	0.1	20	W520002	24-May-15	M3
EPA 200.7	Potassium	mg/L	36.0	36.1	20.0	108	0.2	20	W520002	24-May-15	
EPA 200.7	Silica (SiO2)	mg/L	59.0	59.1	10.7	103	0.1	20	W520002	24-May-15	
EPA 200.7	Sodium	mg/L	64.1	64.5	19.0	106	0.6	20	W520002	24-May-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00095	0.00099	0.00100	94.9	4.2	20	W520041	13-May-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.100	0.0970	0.100	100	3.1	20	W521081	21-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.500	0.493	0.500	97.5	1.4	20	W519239	08-May-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.85	2.73	2.50	97.8	4.3	20	W520075	12-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.0	49.5	50.0	101	3.0	20	W520157	13-May-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	14.9	15.0	3.00	90.2	0.5	20	W519228	08-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.48	2.49	2.00	94.6	0.5	20	W519228	08-May-15	

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0145**
Reported: 26-May-15 09:47

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography (Continued)											
EPA 300.0	Nitrate as N	mg/L	2.53	2.49	2.00	103	1.7	20	W519228	08-May-15	
EPA 300.0	Nitrite as N	mg/L	2.21	2.18	2.00	110	1.4	20	W519228	08-May-15	
EPA 300.0	Sulfate as SO4	mg/L	39.0	38.5	10.0	111	1.3	20	W519228	08-May-15	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

Tuesday, June 16, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505347
Project Name:
Project Number: 5E0290

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/19/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505347

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met with the following exception:

Gross alpha/beta activity is reported in the associated method blank above the minimum detectable concentration value. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724**.**

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783.

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met with the following exception:

Uranium-235 activity is reported in the associated method blank above the minimum detectable concentration value. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505347
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0290
Client PO Number: 15322

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-006-051315	1505347-1		WATER	13-May-15	14:05

ALS

1505347

SVL ANALYTICAL

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SE 0290

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15322

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Gross α/β 900.0	RaD226/228 903.1/904	U 234/235/238	ASTM D 3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																		Call Chris Meyer with Questions
1	NSH-006-051315	5/13/15	1405		2	3			X					X	X	X			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
A Jacobson	5-14-15	1250	Eric Peterson	5/19/15	1120
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1505347

Project Manager: JRK Initials: ECP Date: 5/19/15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	NONE	(YES)	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	(N/A)	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____heavy	N/A	YES	(NO)
16. Were the samples shipped on ice?		YES	(NO)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	(NO)

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	10							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / (NA) (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-19-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1505347

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

12 LBS

1 OF 1

DWT: 14,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

10
-1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4581 6290

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

RRD R 0215

5

Client: SVL Analytical
Project: 5E0290
Sample ID: NSH-006-051315
Legal Location:
Collection Date: 5/13/2015 14:05

Date: *16-Jun-15*
Work Order: 1505347
Lab ID: 1505347-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **6/9/2015**	PrepBy: **DKL**
GROSS ALPHA	2.6 (+/- 1.2)	LT	1.8	pCi/l	NA	6/11/2015 15:09
GROSS BETA	3.3 (+/- 1.4)	LT	2.6	pCi/l	NA	6/11/2015 15:09
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **6/9/2015**	PrepBy: **TDE**
Tracer: U-232	*93.1*		*30-110*	*%REC*	DL = NA	6/11/2015 14:26
U-234	**1.51 (+/- 0.34)**		**0.08**	**pCi/l**	NA	6/11/2015 14:26
U-235	ND (+/- 0.048)	U	0.069	pCi/l	NA	6/11/2015 14:26
U-238	**1.26 (+/- 0.29)**		**0.06**	**pCi/l**	NA	6/11/2015 14:26
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **6/2/2015**	PrepBy: **PJW**
Ra-226	0.43 (+/- 0.2)	LT	0.17	pCi/l	NA	6/9/2015 13:50
Carr: BARIUM	*93.7*		*40-110*	*%REC*	DL = NA	6/9/2015 13:50
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **5/27/2015**	PrepBy: **DKL**
Ra-228	ND (+/- 0.21)	U	0.43	pCi/l	NA	6/2/2015 08:35
Carr: BARIUM	*93.7*		*40-110*	*%REC*	DL = NA	6/2/2015 08:35

Client:	SVL Analytical	**Date:**	*16-Jun-15*
Project:	5E0290	**Work Order:**	1505347
Sample ID:	NSH-006-051315	**Lab ID:**	1505347-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/13/2015 14:05	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505347
Project: 5E0290

Date: *6/16/2015 3:11:*

QC BATCH REPORT

Batch ID: **RE150602-2-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150602-2** Units: **pCi/l** Analysis Date: **6/9/2015 14:30**

Client ID: Run ID: **RE150602-2A** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	25.9 (+/- 6.6)	0.2	30.71		84.4	67-120					P
Carr: BARIUM	31790		34340		92.6	40-110					

MB Sample ID: **RE150602-2** Units: **pCi/l** Analysis Date: **6/9/2015 14:30**

Client ID: Run ID: **RE150602-2A** Prep Date: **6/2/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.144									U
Carr: BARIUM	31550		34340		91.9	40-110					

The following samples were analyzed in this batch: 1505347-1

Client: SVL Analytical
Work Order: 1505347
Project: 5E0290

QC BATCH REPORT

Batch ID: **AS150609-2-3** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.88 (+/- 0.85)	0.04	4.416		111	82-122					P
U-238	5.29 (+/- 0.92)	0.03	4.585		115	78-126					P
Tracer: U-232	3.63	0.05	4.164		87.3	30-110					

MB Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.03									U
U-235	0.016 (+/- 0.02)	0.014									B3
U-238	ND	0.03									U
Tracer: U-232	3.66	0.04	4.164		87.8	30-110					

The following samples were analyzed in this batch: 1505347-1

Client: SVL Analytical
Work Order: 1505347
Project: 5E0290

QC BATCH REPORT

Batch ID: **AB150609-1-2** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150609-1** Units: **pCi/l** Analysis Date: **6/11/2015 14:24**

Client ID: Run ID: **AB150609-1A** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	237 (+/- 43)	6	224.2		106	70-130					P,M3
GROSS BETA	214 (+/- 37)	12	203.5		105	70-130					P,M3

MB Sample ID: **AB150609-1** Units: **pCi/l** Analysis Date: **6/11/2015 14:33**

Client ID: Run ID: **AB150609-1A** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	1.05 (+/- 0.47)	0.66									B3
GROSS BETA	1.21 (+/- 0.69)	1.06									B3

The following samples were analyzed in this batch: 1505347-1

Client: SVL Analytical
Work Order: 1505347
Project: 5E0290

QC BATCH REPORT

Batch ID: **RA150527-1-2** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150527-1** Units: **pCi/l** Analysis Date: **6/2/2015 08:46**

Client ID: Run ID: **RA150527-1A** Prep Date: **5/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	8.1 (+/- 1.9)	0.5	7.743		105	70-130					P
Carr: BARIUM	31790		34340		92.6	40-110					

MB Sample ID: **RA150527-1** Units: **pCi/l** Analysis Date: **6/2/2015 09:03**

Client ID: Run ID: **RA150527-1A** Prep Date: **5/27/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.57									U
Carr: BARIUM	31550		34340		91.9	40-110					

The following samples were analyzed in this batch: 1505347-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315	**Sampling Time**	2:05 PM		
Matrix	Water	**Sample Location**	W5E0290-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	5/20/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315	**Sampling Time**	2:05 PM		
Matrix	Water	**Sample Location**	W5E0290-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315	**Sampling Time**	2:05 PM		
Matrix	Water	**Sample Location**	W5E0290-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Toluene	1.15	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150515059-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	100.6	70-130
Bromofluorobenzene	EPA 524.3	92.2	70-130
Toluene-d8	EPA 524.3	98.6	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001A	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315 DUPLICATE	**Sampling Time**	2:05 PM		
Matrix	Water	**Sample Location**	W5E0290-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	5/20/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001A	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315 DUPLICATE	**Sampling Time**	2:05 PM		
Matrix	Water	**Sample Location**	W5E0290-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001A	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015	12:15 PM
Client Sample ID	NSH-006-051315 DUPLICATE	**Sampling Time**	2:05 PM			
Matrix	Water	**Sample Location**	W5E0290-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Toluene	1.15	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150515059-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	97.2	70-130
Bromofluorobenzene	EPA 524.3	92.6	70-130
Toluene-d8	EPA 524.3	100.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-002	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0290-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Acetone	8.95	ug/L	0.5	2.5	5/19/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-002	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0290-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-002	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0290-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150515059-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.0	70-130
Bromofluorobenzene	EPA 524.3	91.2	70-130
Toluene-d8	EPA 524.3	97.4	70-130

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.0	ug/L	10	100.0	70-130	5/20/2015	5/20/2015
Toluene	10.0	ug/L	10	100.0	70-130	5/20/2015	5/20/2015
Tetrachloroethene	9.13	ug/L	10	91.3	70-130	5/20/2015	5/20/2015
Ethylbenzene	9.68	ug/L	10	96.8	70-130	5/20/2015	5/20/2015
Chlorobenzene	9.67	ug/L	10	96.7	70-130	5/20/2015	5/20/2015
Benzene	9.59	ug/L	10	95.9	70-130	5/20/2015	5/20/2015
1,1-Dichloroethene	9.79	ug/L	10	97.9	70-130	5/20/2015	5/20/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.3	ug/L	10	103.0	3.0	0-30	5/20/2015	5/20/2015
Toluene	10.4	ug/L	10	104.0	3.9	0-30	5/20/2015	5/20/2015
Tetrachloroethene	9.60	ug/L	10	96.0	5.0	0-30	5/20/2015	5/20/2015
Ethylbenzene	9.50	ug/L	10	95.0	1.9	0-30	5/20/2015	5/20/2015
Chlorobenzene	9.78	ug/L	10	97.8	1.1	0-30	5/20/2015	5/20/2015
Benzene	10.2	ug/L	10	102.0	6.2	0-30	5/20/2015	5/20/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	5.1	0-30	5/20/2015	5/20/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150520006-001	Trichloroethene	ND	9.30	ug/L	10	93.0	70-130	5/20/2015	5/20/2015
150520006-001	Toluene	ND	11.1	ug/L	10	111.0	70-130	5/20/2015	5/20/2015
150520006-001	Tetrachloroethene	ND	8.21	ug/L	10	82.1	70-130	5/20/2015	5/20/2015
150520006-001	Ethylbenzene	ND	10.1	ug/L	10	101.0	70-130	5/20/2015	5/20/2015
150520006-001	Chlorobenzene	ND	9.80	ug/L	10	98.0	70-130	5/20/2015	5/20/2015
150520006-001	Benzene	ND	10.6	ug/L	10	106.0	70-130	5/20/2015	5/20/2015
150520006-001	1,1-Dichloroethene	ND	10.7	ug/L	10	107.0	70-130	5/20/2015	5/20/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015

Comments:

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Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-dichloropropene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
2-Chlorotoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
4-Chlorotoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
Acetone	ND	ug/L	2.5	5/20/2015	5/20/2015
Benzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromochloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromodichloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromoform	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromomethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/20/2015	5/20/2015
Chlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloroform	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Dibromochloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Dibromomethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Ethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/20/2015	5/20/2015
Isopropylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Methylene chloride	ND	ug/L	0.5	5/20/2015	5/20/2015
Naphthalene	ND	ug/L	0.5	5/20/2015	5/20/2015
n-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
n-Propylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
p-isopropyltoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
sec-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Styrene	ND	ug/L	0.5	5/20/2015	5/20/2015
tert-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Tetrachloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Toluene	ND	ug/L	0.5	5/20/2015	5/20/2015
Total Xylene	ND	ug/L	0.5	5/20/2015	5/20/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Trichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Vinyl Chloride	ND	ug/L	0.5	5/20/2015	5/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Sample Number	150515059-001	**Sampling Date**	5/13/2015	**Date/Time Received**	5/15/2015 12:15 PM
Client Sample ID	NSH-006-051315	**Sampling Time**	2:05 PM	**Extraction Date**	5/20/2015
Matrix	Water	**Sample Location**	W5E0290-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Naphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Phenanthrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U

Surrogate Data

Sample Number 150515059-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	102.2	10-125

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit
U Compound was analyzed for but not detected

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.75	ug/L	5	75.0	60-137	5/20/2015	5/22/2015
Acenaphthene	3.18	ug/L	5	63.6	58-118	5/20/2015	5/22/2015
Acenaphthylene	3.09	ug/L	5	61.8	52-124	5/20/2015	5/22/2015
Anthracene	3.47	ug/L	5	69.4	59-122	5/20/2015	5/22/2015
Benzo(ghi)perylene	3.55	ug/L	5	71.0	50-136	5/20/2015	5/22/2015
Benzo[a]anthracene	4.39	ug/L	5	87.8	71-124	5/20/2015	5/22/2015
Benzo[a]pyrene	3.47	ug/L	5	69.4	53-133	5/20/2015	5/22/2015
2-Methylnaphthalene	3.59	ug/L	5	71.8	56-128	5/20/2015	5/22/2015
Benzo[k]fluoranthene	3.49	ug/L	5	69.8	50-143	5/20/2015	5/22/2015
Pyrene	3.23	ug/L	5	64.6	53-130	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	3.62	ug/L	5	72.4	52-140	5/20/2015	5/22/2015
Fluoranthene	3.30	ug/L	5	66.0	57-134	5/20/2015	5/22/2015
Fluorene	3.57	ug/L	5	71.4	61-123	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.62	ug/L	5	72.4	51-137	5/20/2015	5/22/2015
Naphthalene	3.14	ug/L	5	62.8	53-120	5/20/2015	5/22/2015
Phenanthrene	3.47	ug/L	5	69.4	60-124	5/20/2015	5/22/2015
Benzo[b]fluoranthene	3.86	ug/L	5	77.2	60-139	5/20/2015	5/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.51	ug/L	5	70.2	6.6	0-50	5/20/2015	5/22/2015
Acenaphthene	2.98	ug/L	5	59.6	6.5	0-50	5/20/2015	5/22/2015
Acenaphthylene	2.89	ug/L	5	57.8	6.7	0-50	5/20/2015	5/22/2015
Anthracene	3.22	ug/L	5	64.4	7.5	0-50	5/20/2015	5/22/2015
Benzo(ghi)perylene	3.08	ug/L	5	61.6	14.2	0-50	5/20/2015	5/22/2015
Benzo[a]anthracene	4.07	ug/L	5	81.4	7.6	0-50	5/20/2015	5/22/2015
Benzo[a]pyrene	3.12	ug/L	5	62.4	10.6	0-50	5/20/2015	5/22/2015
2-Methylnaphthalene	3.39	ug/L	5	67.8	5.7	0-50	5/20/2015	5/22/2015
Benzo[k]fluoranthene	3.19	ug/L	5	63.8	9.0	0-50	5/20/2015	5/22/2015
Pyrene	2.98	ug/L	5	59.6	8.1	0-50	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	3.17	ug/L	5	63.4	13.3	0-50	5/20/2015	5/22/2015
Fluoranthene	3.08	ug/L	5	61.6	6.9	0-50	5/20/2015	5/22/2015
Fluorene	3.27	ug/L	5	65.4	8.8	0-50	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.18	ug/L	5	63.6	12.9	0-50	5/20/2015	5/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150515059
Project Name: SVL #W5E0290

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	2.90	ug/L	5	58.0	7.9	0-50	5/20/2015	5/22/2015
Phenanthrene	3.25	ug/L	5	65.0	6.5	0-50	5/20/2015	5/22/2015
Benzo[b]fluoranthene	3.60	ug/L	5	72.0	7.0	0-50	5/20/2015	5/22/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/20/2015	5/22/2015
Acenaphthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Acenaphthylene	ND	ug/L	0.01	5/20/2015	5/22/2015
Anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Chrysene	ND	ug/L	0.01	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Fluorene	ND	ug/L	0.01	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Naphthalene	ND	ug/L	0.01	5/20/2015	5/22/2015
Phenanthrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150515059
Order Date: 5/15/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0290
Comment:

Sample #: 150515059-001 **Customer Sample #:** NSH-006-051315

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/13/2015
Quantity: 4 **Date Received:** 5/15/2015 12:15:00 PM **Time Collected:** 2:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	5/28/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	5/28/2015	***Normal (~10 Days)***

Sample #: 150515059-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/13/2015
Quantity: 1 **Date Received:** 5/15/2015 12:15:00 PM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	5/28/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	2.0
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

WSE0290

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 1.8

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E. VAN BUREN #545
PHOENIX, AZ 85004
Phone Number: 602-760-2150
FAX Number:
E-mail:

Invoice Sent To: GUNNISON COPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N. 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Project Name: EXCELSIOR

Sampler's Signature:

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection: Date	Time	Collected by: (Init.)	Misc.: Matrix Type (From Table 1)	No. of Containers	Preservative(s): Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Analyses Required: METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC, RAM	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-006-051315	5/13/15	1405		2	15								X	X	X	X	X	X	X	X	X	X		METALS AND SILICA SAMPLE WAS FILTERED WITH A 0.45 um DISPOSIBLE FILTER CAPSULE, PRESERVED WITH HNO_3.
2																									
3	TRIP BLANK					1																X			
4																									
5																									
6																									
7																									SHIPPED UPS NEXT DAY
8																									1Z 9X8 989 23 1001
9																									2720
10																									

Relinquished by: [illegible]	Date: 5/13/15	Time: 1450	Received by: N.C. [illegible]	Date: 5-13-15	Time: 1450
Relinquished by: N.C. [illegible]	Date: 5/13/15	Time: 1530	Received by: [illegible]	Date: 5-14-15	Time: 9:50

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

↳ S. Jacobson 5-14-15 1315

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-006-051315	W5E0290-01	Ground Water	13-May-15 14:05	KF	14-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Client Sample ID: **NSH-006-051315**
SVL Sample ID: **W5E0290-01 (Ground Water)**

Sampled: 13-May-15 14:05
Received: 14-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W520254	DT	05/29/15 12:23	U
EPA 200.7	**Calcium**	49.5	mg/L	0.100	0.029		W520254	DT	05/29/15 12:23	
EPA 200.7	**Iron**	0.052	mg/L	0.060	0.026		W520254	DT	05/29/15 14:18	J
EPA 200.7	**Magnesium**	12.1	mg/L	0.20	0.11		W520254	DT	05/29/15 12:23	
EPA 200.7	**Potassium**	1.27	mg/L	0.50	0.17		W520254	DT	05/29/15 12:23	
EPA 200.7	**Silica (SiO2)**	36.8	mg/L	0.17	0.12		W520254	DT	05/29/15 12:23	B7
EPA 200.7	**Sodium**	28.0	mg/L	0.50	0.05		W520254	DT	05/29/15 12:23	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 07:10	U
EPA 200.8	**Arsenic**	0.00156	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 07:10	J
EPA 200.8	**Barium**	0.103	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Beryllium**	0.00034	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Boron**	0.0358	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 07:10	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 07:10	U
EPA 200.8	**Chromium**	0.0060	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Cobalt**	0.00008	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 07:10	J
EPA 200.8	**Copper**	0.0115	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Lead**	0.00009	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 07:10	J
EPA 200.8	**Manganese**	0.00712	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Molybdenum**	0.0163	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Nickel**	0.0014	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Selenium**	0.0025	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 07:10	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 07:10	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 07:10	U
EPA 200.8	**Uranium**	0.00363	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Vanadium**	0.0040	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 07:10	
EPA 200.8	**Zinc**	0.900	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 07:10	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W520309	STA	05/20/15 13:44	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	180	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:48	
SM 2320B	**Bicarbonate**	180	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:48	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:48	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:48	U
SM 2510 B	**Specific conductance**	436	µmhos/cm	5.00			W520271	JDM	05/15/15 11:40	
SM 2540 C	**Total Diss. Solids**	284	mg/L	10			W520262	JDM	05/15/15 16:25	
SM 4500 H B	**pH @26.0°C**	8.02	pH Units				W520293	AGF	05/20/15 10:48	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W521183	MAD	05/21/15 13:10	U
SM 4500-P-E	**Orthophosphate as P**	0.016	mg/L	0.010	0.006		W520289	MCB	05/15/15 12:20	
SM 4500-S-F	**Sulfide**	0.48	mg/L	1.00	0.39		W521066	SM	05/19/15 16:23	J
SM 5310B	Total Organic Carbon	< 0.24	mg/L	1.00	0.24		W521129	SM	05/21/15 19:55	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Client Sample ID: **NSH-006-051315**
SVL Sample ID: **W5E0290-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 13-May-15 14:05
Received: 14-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	26.2	mg/L	2.00	0.56	10	W520249	MCE	05/14/15 12:18	D2
EPA 300.0	**Fluoride**	2.53	mg/L	0.100	0.022		W520249	MCE	05/14/15 11:59	
EPA 300.0	**Nitrate as N**	1.84	mg/L	0.050	0.008		W520249	MCE	05/14/15 11:59	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W520249	MCE	05/14/15 11:59	U
EPA 300.0	**Sulfate as SO4**	24.4	mg/L	0.30	0.05		W520249	MCE	05/14/15 11:59	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.75 meq/L Anion Sum: 5.11 meq/L C/A Balance: -3.63 % Calculated TDS: 297 TDS/cTDS: 0.96 TDS/eC: 0.65

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W520254	29-May-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W520254	29-May-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W520254	29-May-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W520254	29-May-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W520254	29-May-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W520254	29-May-15	B7,U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W520254	29-May-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W520309	20-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.76		1.0	W520293	20-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.76		1.0	W520293	20-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W520293	20-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W520293	20-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W520262	15-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W521183	21-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W520289	15-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W521066	19-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W521129	21-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W520249	15-May-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W520249	15-May-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W520249	15-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W520249	15-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W520249	15-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.94	1.00	94.5	85 - 115	W520254	29-May-15	
EPA 200.7	Calcium	mg/L	18.8	20.0	93.8	85 - 115	W520254	29-May-15	
EPA 200.7	Iron	mg/L	9.09	10.0	90.9	85 - 115	W520254	29-May-15	
EPA 200.7	Magnesium	mg/L	18.5	20.0	92.5	85 - 115	W520254	29-May-15	
EPA 200.7	Potassium	mg/L	19.0	20.0	94.8	85 - 115	W520254	29-May-15	
EPA 200.7	Silica (SiO2)	mg/L	10.3	10.7	96.4	85 - 115	W520254	29-May-15	B7
EPA 200.7	Sodium	mg/L	17.4	19.0	91.3	85 - 115	W520254	29-May-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00474	0.00500	94.8	85 - 115	W520309	20-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	101	99.3	102	85 - 115	W520293	20-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	101	99.3	102	85 - 115	W520293	20-May-15	
SM 2510 B	Specific conductance	µmhos/cm	316	306	103	90 - 110	W520271	15-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.154	0.150	103	90 - 110	W521183	21-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.739	0.786	94.0	90 - 110	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.49	2.50	99.8	80 - 120	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.6	34.3	101	90 - 110	W521129	21-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.97	3.00	99.1	90 - 110	W520249	15-May-15	
EPA 300.0	Fluoride	mg/L	1.93	2.00	96.6	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	1.97	2.01	98.1	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrite as N	mg/L	2.56	2.51	102	90 - 110	W520249	15-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.75	10.0	97.5	90 - 110	W520249	15-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	178	180	1.0	20	W520293	20-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	178	180	1.0	20	W520293	20-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W520293	20-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W520293	20-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	438	436	0.5	20	W520271	15-May-15	
SM 2540 C	Total Diss. Solids	mg/L	551	557	1.1	10	W520262	15-May-15	
SM 2540 C	Total Diss. Solids	mg/L	552	555	0.5	10	W520262	15-May-15	
SM 4500 H B	pH	pH Units	7.95	8.02	0.9	20	W520293	20-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.05	0.07	1.00	98.6	70 - 130	W520254	29-May-15	
EPA 200.7	Aluminum	mg/L	0.95	<0.036	1.00	95.5	70 - 130	W520254	29-May-15	
EPA 200.7	Calcium	mg/L	308	290	20.0	89.9	70 - 130	W520254	29-May-15	
EPA 200.7	Calcium	mg/L	139	121	20.0	87.3	70 - 130	W520254	29-May-15	
EPA 200.7	Iron	mg/L	9.30	<0.026	10.0	93.0	70 - 130	W520254	29-May-15	
EPA 200.7	Iron	mg/L	9.50	<0.026	10.0	95.0	70 - 130	W520254	29-May-15	
EPA 200.7	Magnesium	mg/L	47.9	29.1	20.0	94.0	70 - 130	W520254	29-May-15	
EPA 200.7	Magnesium	mg/L	32.4	13.8	20.0	93.1	70 - 130	W520254	29-May-15	
EPA 200.7	Potassium	mg/L	37.8	17.8	20.0	99.9	70 - 130	W520254	29-May-15	
EPA 200.7	Potassium	mg/L	21.6	2.03	20.0	97.8	70 - 130	W520254	29-May-15	
EPA 200.7	Silica (SiO2)	mg/L	44.3	33.4	10.7	102	70 - 130	W520254	29-May-15	B7
EPA 200.7	Silica (SiO2)	mg/L	53.8	43.6	10.7	94.6	70 - 130	W520254	29-May-15	B7
EPA 200.7	Sodium	mg/L	162	144	19.0	93.2	70 - 130	W520254	29-May-15	
EPA 200.7	Sodium	mg/L	45.3	27.8	19.0	91.9	70 - 130	W520254	29-May-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00098	<0.00004	0.00100	98.0	70 - 130	W520309	20-May-15	
EPA 245.1	Mercury	mg/L	0.00102	0.00006	0.00100	96.0	70 - 130	W520309	20-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0930	<0.0025	0.100	93.0	75 - 125	W521183	21-May-15	

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.513	0.016	0.500	99.5	75 - 125	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.74	0.48	2.50	90.1	80 - 120	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.5	<0.24	50.0	103	80 - 120	W521129	21-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	61.7	59.7	3.00	R > 4S	90 - 110	W520249	15-May-15	D2,M3
EPA 300.0	Chloride	mg/L	28.9	25.6	3.00	109	90 - 110	W520249	18-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.23	0.311	2.00	96.1	90 - 110	W520249	15-May-15	
EPA 300.0	Fluoride	mg/L	2.21	0.224	2.00	99.1	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	4.96	2.76	2.00	110	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	3.55	1.39	2.00	108	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrite as N	mg/L	2.65	<0.014	2.00	133	90 - 110	W520249	15-May-15	M1
EPA 300.0	Nitrite as N	mg/L	1.94	<0.014	2.00	97.0	90 - 110	W520249	15-May-15	
EPA 300.0	Sulfate as SO4	mg/L	63.6	53.2	10.0	105	90 - 110	W520249	15-May-15	D2,M3
EPA 300.0	Sulfate as SO4	mg/L	58.9	49.7	10.0	92.2	90 - 110	W520249	18-May-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.05	1.05	1.00	98.1	0.5	20	W520254	29-May-15	
EPA 200.7	Calcium	mg/L	309	308	20.0	95.0	0.3	20	W520254	29-May-15	
EPA 200.7	Iron	mg/L	9.30	9.30	10.0	93.0	0.0	20	W520254	29-May-15	
EPA 200.7	Magnesium	mg/L	47.8	47.9	20.0	93.4	0.3	20	W520254	29-May-15	
EPA 200.7	Potassium	mg/L	37.9	37.8	20.0	100	0.2	20	W520254	29-May-15	
EPA 200.7	Silica (SiO2)	mg/L	44.2	44.3	10.7	101	0.3	20	W520254	29-May-15	B7
EPA 200.7	Sodium	mg/L	162	162	19.0	91.1	0.2	20	W520254	29-May-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00099	0.00098	0.00100	99.0	1.0	20	W520309	20-May-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0900	0.0930	0.100	90.0	3.3	20	W521183	21-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0290**
Reported: 09-Jun-15 17:47

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)											
SM 4500-P-E	Orthophosphate as P	mg/L	0.511	0.513	0.500	99.1	0.4	20	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.66	2.74	2.50	86.9	3.0	20	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.3	51.5	50.0	103	0.4	20	W521129	21-May-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	62.3	61.7	3.00	R > 4S	1.0	20	W520249	15-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.26	2.23	2.00	97.5	1.2	20	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	5.01	4.96	2.00	113	1.1	20	W520249	15-May-15	M1
EPA 300.0	Nitrite as N	mg/L	2.69	2.65	2.00	134	1.2	20	W520249	15-May-15	M1
EPA 300.0	Sulfate as SO4	mg/L	64.2	63.6	10.0	R > 4S	0.9	20	W520249	15-May-15	D2,M3

Notes and Definitions

B7	Target analyte detected in method blank exceeded method QC limits, but concentrations in the samples are at least 10x the blank concentration.
D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	NSH-016-051415	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5E0321-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	1.30	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	5/20/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Benzene	0.34	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	J
Bromobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	NSH-016-051415	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5E0321-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	NSH-016-051415	**Sampling Time**	2:00 PM		
Matrix	Water	**Sample Location**	W5E0321-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Toluene	8.83	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150519030-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	105.2	70-130
Bromofluorobenzene	EPA 524.3	93.0	70-130
Toluene-d8	EPA 524.3	99.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001A	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015	11:24 AM
Client Sample ID	NSH-016-051415 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5E0321-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	1.33	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	5/20/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Benzene	0.36	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	J
Bromobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001A	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015	11:24 AM
Client Sample ID	NSH-016-051415 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5E0321-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001A	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015	11:24 AM
Client Sample ID	NSH-016-051415 DUPLICATE	**Sampling Time**	2:00 PM			
Matrix	Water	**Sample Location**	W5E0321-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Toluene	9.14	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/20/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150519030-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	98.0	70-130
Bromofluorobenzene	EPA 524.3	93.2	70-130
Toluene-d8	EPA 524.3	101.0	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-002	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0321-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Acetone	12.0	ug/L	0.5	2.5	5/19/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-002	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0321-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-002	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0321-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/19/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150519030-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.0	70-130
Bromofluorobenzene	EPA 524.3	93.4	70-130
Toluene-d8	EPA 524.3	95.6	70-130

Authorized Signature

John Coddington, Lab Manager

J	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.0	ug/L	10	100.0	70-130	5/20/2015	5/20/2015
Toluene	10.0	ug/L	10	100.0	70-130	5/20/2015	5/20/2015
Tetrachloroethene	9.13	ug/L	10	91.3	70-130	5/20/2015	5/20/2015
Ethylbenzene	9.68	ug/L	10	96.8	70-130	5/20/2015	5/20/2015
Chlorobenzene	9.67	ug/L	10	96.7	70-130	5/20/2015	5/20/2015
Benzene	9.59	ug/L	10	95.9	70-130	5/20/2015	5/20/2015
1,1-Dichloroethene	9.79	ug/L	10	97.9	70-130	5/20/2015	5/20/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	10.3	ug/L	10	103.0	3.0	0-30	5/20/2015	5/20/2015
Toluene	10.4	ug/L	10	104.0	3.9	0-30	5/20/2015	5/20/2015
Tetrachloroethene	9.60	ug/L	10	96.0	5.0	0-30	5/20/2015	5/20/2015
Ethylbenzene	9.50	ug/L	10	95.0	1.9	0-30	5/20/2015	5/20/2015
Chlorobenzene	9.78	ug/L	10	97.8	1.1	0-30	5/20/2015	5/20/2015
Benzene	10.2	ug/L	10	102.0	6.2	0-30	5/20/2015	5/20/2015
1,1-Dichloroethene	10.3	ug/L	10	103.0	5.1	0-30	5/20/2015	5/20/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150520006-001	Trichloroethene	ND	9.30	ug/L	10	93.0	70-130	5/20/2015	5/20/2015
150520006-001	Toluene	ND	11.1	ug/L	10	111.0	70-130	5/20/2015	5/20/2015
150520006-001	Tetrachloroethene	ND	8.21	ug/L	10	82.1	70-130	5/20/2015	5/20/2015
150520006-001	Ethylbenzene	ND	10.1	ug/L	10	101.0	70-130	5/20/2015	5/20/2015
150520006-001	Chlorobenzene	ND	9.80	ug/L	10	98.0	70-130	5/20/2015	5/20/2015
150520006-001	Benzene	ND	10.6	ug/L	10	106.0	70-130	5/20/2015	5/20/2015
150520006-001	1,1-Dichloroethene	ND	10.7	ug/L	10	107.0	70-130	5/20/2015	5/20/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,1-dichloropropene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/20/2015	5/20/2015
2-Chlorotoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
4-Chlorotoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
Acetone	ND	ug/L	2.5	5/20/2015	5/20/2015
Benzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromochloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromodichloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromoform	ND	ug/L	0.5	5/20/2015	5/20/2015
Bromomethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/20/2015	5/20/2015
Chlorobenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloroethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloroform	ND	ug/L	0.5	5/20/2015	5/20/2015
Chloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Dibromochloromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Dibromomethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Ethylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/20/2015	5/20/2015
Isopropylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Methylene chloride	ND	ug/L	0.5	5/20/2015	5/20/2015
Naphthalene	ND	ug/L	0.5	5/20/2015	5/20/2015
n-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
n-Propylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
p-isopropyltoluene	ND	ug/L	0.5	5/20/2015	5/20/2015
sec-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Styrene	ND	ug/L	0.5	5/20/2015	5/20/2015
tert-Butylbenzene	ND	ug/L	0.5	5/20/2015	5/20/2015
Tetrachloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Toluene	ND	ug/L	0.5	5/20/2015	5/20/2015
Total Xylene	ND	ug/L	0.5	5/20/2015	5/20/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Trichloroethene	ND	ug/L	0.5	5/20/2015	5/20/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/20/2015	5/20/2015
Vinyl Chloride	ND	ug/L	0.5	5/20/2015	5/20/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015 11:24 AM
Client Sample ID	NSH-016-051415	**Sampling Time**	2:00 PM	**Extraction Date**	5/20/2015
Matrix	Water	**Sample Location**	W5E0321-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Naphthalene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Sample Number	150519030-001	**Sampling Date**	5/14/2015	**Date/Time Received**	5/19/2015	11:24 AM
Client Sample ID	NSH-016-051415	**Sampling Time**	2:00 PM	**Extraction Date**	5/20/2015	
Matrix	Water	**Sample Location**	W5E0321-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Phenanthrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	5/22/2015	BMM	EPA 8270D	U

Surrogate Data

Sample Number 150519030-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	92.4	10-125

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.75	ug/L	5	75.0	60-137	5/20/2015	5/22/2015
Acenaphthene	3.18	ug/L	5	63.6	58-118	5/20/2015	5/22/2015
Acenaphthylene	3.09	ug/L	5	61.8	52-124	5/20/2015	5/22/2015
Anthracene	3.47	ug/L	5	69.4	59-122	5/20/2015	5/22/2015
Benzo(ghi)perylene	3.55	ug/L	5	71.0	50-136	5/20/2015	5/22/2015
Benzo[a]anthracene	4.39	ug/L	5	87.8	71-124	5/20/2015	5/22/2015
Benzo[a]pyrene	3.47	ug/L	5	69.4	53-133	5/20/2015	5/22/2015
2-Methylnaphthalene	3.59	ug/L	5	71.8	56-128	5/20/2015	5/22/2015
Benzo[k]fluoranthene	3.49	ug/L	5	69.8	50-143	5/20/2015	5/22/2015
Pyrene	3.23	ug/L	5	64.6	53-130	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	3.62	ug/L	5	72.4	52-140	5/20/2015	5/22/2015
Fluoranthene	3.30	ug/L	5	66.0	57-134	5/20/2015	5/22/2015
Fluorene	3.57	ug/L	5	71.4	61-123	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.62	ug/L	5	72.4	51-137	5/20/2015	5/22/2015
Naphthalene	3.14	ug/L	5	62.8	53-120	5/20/2015	5/22/2015
Phenanthrene	3.47	ug/L	5	69.4	60-124	5/20/2015	5/22/2015
Benzo[b]fluoranthene	3.86	ug/L	5	77.2	60-139	5/20/2015	5/22/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.51	ug/L	5	70.2	6.6	0-50	5/20/2015	5/22/2015
Acenaphthene	2.98	ug/L	5	59.6	6.5	0-50	5/20/2015	5/22/2015
Acenaphthylene	2.89	ug/L	5	57.8	6.7	0-50	5/20/2015	5/22/2015
Anthracene	3.22	ug/L	5	64.4	7.5	0-50	5/20/2015	5/22/2015
Benzo(ghi)perylene	3.08	ug/L	5	61.6	14.2	0-50	5/20/2015	5/22/2015
Benzo[a]anthracene	4.07	ug/L	5	81.4	7.6	0-50	5/20/2015	5/22/2015
Benzo[a]pyrene	3.12	ug/L	5	62.4	10.6	0-50	5/20/2015	5/22/2015
2-Methylnaphthalene	3.39	ug/L	5	67.8	5.7	0-50	5/20/2015	5/22/2015
Benzo[k]fluoranthene	3.19	ug/L	5	63.8	9.0	0-50	5/20/2015	5/22/2015
Pyrene	2.98	ug/L	5	59.6	8.1	0-50	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	3.17	ug/L	5	63.4	13.3	0-50	5/20/2015	5/22/2015
Fluoranthene	3.08	ug/L	5	61.6	6.9	0-50	5/20/2015	5/22/2015
Fluorene	3.27	ug/L	5	65.4	8.8	0-50	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	3.18	ug/L	5	63.6	12.9	0-50	5/20/2015	5/22/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150519030
Project Name: SVL #W5E0321

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	2.90	ug/L	5	58.0	7.9	0-50	5/20/2015	5/22/2015
Phenanthrene	3.25	ug/L	5	65.0	6.5	0-50	5/20/2015	5/22/2015
Benzo[b]fluoranthene	3.60	ug/L	5	72.0	7.0	0-50	5/20/2015	5/22/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/20/2015	5/22/2015
Acenaphthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Acenaphthylene	ND	ug/L	0.01	5/20/2015	5/22/2015
Anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Chrysene	ND	ug/L	0.01	5/20/2015	5/22/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/20/2015	5/22/2015
Fluoranthene	ND	ug/L	0.01	5/20/2015	5/22/2015
Fluorene	ND	ug/L	0.01	5/20/2015	5/22/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Naphthalene	ND	ug/L	0.01	5/20/2015	5/22/2015
Phenanthrene	ND	ug/L	0.01	5/20/2015	5/22/2015
Pyrene	ND	ug/L	0.01	5/20/2015	5/22/2015

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150519030
Order Date: 5/19/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0321
Comment:

Sample #: 150519030-001 **Customer Sample #:** NSH-016-051415

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/14/2015
Quantity: 4 **Date Received:** 5/19/2015 11:24:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	6/1/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	6/1/2015	***Normal (~10 Days)***

Sample #: 150519030-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/14/2015
Quantity: 1 **Date Received:** 5/19/2015 11:24:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	6/1/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	1.3 / 4.3
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0321

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 2.2

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN ST #545
PHOENIX AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: GUNNISON COPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N. 44TH ST #330
PHOENIX, AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Project Name: EXCELSIOR
Sampler's Signature: R.C.

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	Metals (Dissolved)	Silica (Dissolved)	Alkalinity, Anions	Wet Chem	NO_2, NO_3	Cyanide	Sulfide	VOCs (524.3)	TDC, PAHs	Radiochem, Isotopes	Rush Instructions (Days)	Comments
1	NSH-016-051415	5/14/15	1400	CG	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		METALS AND SILICA SAMPLE WAS FIELD FILTERED WITH A 0.45um DISPOSABLE GROUNDWATER FILTER, PRESERVED WITH HNO_3.
2																									
3	TRIP BLANK					1															X				
4																									
5																									
6																									SHIPPED UPS AIR
7																									1Z 9X8 989 23 1001
8																									259 7
9																									
10																									

Relinquished by: R.C.	Date: 5/14/15	Time: 1530	Received by:	Date: 5-15-15	Time: 10:15
Relinquished by:	Date: 5/18/15	Time: 12:30	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-016-051415	W5E0321-01	Ground Water	14-May-15 14:00	CG	15-May-2015	
TRIP BLANK	W5E0321-02	Trip Blank-Water	14-May-15 00:00	CG	15-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Client Sample ID: **NSH-016-051415**
SVL Sample ID: **W5E0321-01 (Ground Water)**

Sampled: 14-May-15 14:00
Received: 15-May-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W520317	DT	06/02/15 12:36	U
EPA 200.7	**Calcium**	61.5	mg/L	0.100	0.029		W520317	DT	06/02/15 12:36	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W520317	DT	06/02/15 12:36	U
EPA 200.7	**Magnesium**	9.18	mg/L	0.20	0.11		W520317	DT	06/02/15 12:36	
EPA 200.7	**Potassium**	2.16	mg/L	0.50	0.17		W520317	DT	06/02/15 12:36	
EPA 200.7	**Silica (SiO2)**	35.5	mg/L	0.17	0.12		W520317	DT	06/02/15 12:36	
EPA 200.7	**Sodium**	66.8	mg/L	0.50	0.05		W520317	DT	06/02/15 12:36	
EPA 200.8	Antimony	< 0.00019	mg/L	0.00300	0.00019		W519088	KWH	05/19/15 07:13	U
EPA 200.8	**Arsenic**	0.00195	mg/L	0.00300	0.00027		W519088	KWH	05/19/15 07:13	J
EPA 200.8	**Barium**	0.337	mg/L	0.00100	0.000099		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Beryllium**	0.00017	mg/L	0.00020	0.000048		W519088	KWH	05/19/15 07:13	J
EPA 200.8	**Boron**	0.0506	mg/L	0.0050	0.0012		W519088	KWH	05/19/15 07:13	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W519088	KWH	05/19/15 07:13	U
EPA 200.8	**Chromium**	0.0073	mg/L	0.0015	0.0004		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Cobalt**	0.00044	mg/L	0.00100	0.000054		W519088	KWH	05/19/15 07:13	J
EPA 200.8	**Copper**	0.0151	mg/L	0.00100	0.00015		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Lead**	0.00093	mg/L	0.00300	0.000031		W519088	KWH	05/19/15 07:13	J
EPA 200.8	**Manganese**	0.120	mg/L	0.00100	0.000025		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Molybdenum**	0.0111	mg/L	0.00100	0.00009		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Nickel**	0.0078	mg/L	0.0010	0.0004		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Selenium**	0.0026	mg/L	0.0030	0.0006		W519088	KWH	05/19/15 07:13	J
EPA 200.8	Silver	< 0.000021	mg/L	0.000100	0.000021		W519088	KWH	05/19/15 07:13	U
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W519088	KWH	05/19/15 07:13	U
EPA 200.8	**Uranium**	0.00421	mg/L	0.00100	0.000014		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Vanadium**	0.0042	mg/L	0.0030	0.0009		W519088	KWH	05/19/15 07:13	
EPA 200.8	**Zinc**	0.751	mg/L	0.0050	0.0010		W519088	KWH	05/19/15 07:13	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W522038	STA	05/27/15 14:17	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	213	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:54	
SM 2320B	**Bicarbonate**	213	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:54	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:54	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W520293	AGF	05/20/15 10:54	U
SM 2510 B	**Specific conductance**	660	µmhos/cm	5.00			W521013	RS	05/18/15 08:00	
SM 2540 C	**Total Diss. Solids**	418	mg/L	10			W520265	RS	05/18/15 11:45	
SM 4500 H B	**pH @25.0°C**	8.03	pH Units				W520293	AGF	05/20/15 10:54	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W521183	MAD	05/21/15 13:12	U
SM 4500-P-E	**Orthophosphate as P**	0.008	mg/L	0.010	0.006		W520289	MCB	05/15/15 12:21	Q14,J
SM 4500-S-F	**Sulfide**	0.56	mg/L	1.00	0.39		W521066	SM	05/19/15 16:23	J
SM 5310B	**Total Organic Carbon**	0.44	mg/L	1.00	0.24		W521129	SM	05/21/15 20:08	J

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Client Sample ID: **NSH-016-051415**
SVL Sample ID: **W5E0321-01 (Ground Water)**

Sampled: 14-May-15 14:00
Received: 15-May-15
Sampled By: CG

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	76.4	mg/L	2.00	0.56	10	W520249	MCE	05/15/15 13:20	D2
EPA 300.0	**Fluoride**	2.71	mg/L	0.100	0.022		W520249	MCE	05/15/15 12:57	
EPA 300.0	**Nitrate as N**	3.88	mg/L	0.050	0.008		W520249	MCE	05/15/15 12:57	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W520249	MCE	05/15/15 12:57	U
EPA 300.0	**Sulfate as SO4**	15.4	mg/L	0.30	0.05		W520249	MCE	05/15/15 12:57	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.82 meq/L Anion Sum: 7.15 meq/L C/A Balance: -2.36 % Calculated TDS: 415 TDS/cTDS: 1.01 TDS/eC: 0.63

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W520317	02-Jun-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W520317	02-Jun-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W520317	02-Jun-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W520317	02-Jun-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W520317	02-Jun-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W520317	02-Jun-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W520317	02-Jun-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W519088	19-May-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W519088	19-May-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W519088	19-May-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W519088	19-May-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W519088	19-May-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W519088	19-May-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W519088	19-May-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W519088	19-May-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W519088	19-May-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W519088	19-May-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W519088	19-May-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W519088	19-May-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W519088	19-May-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W519088	19-May-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W519088	19-May-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W519088	19-May-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W519088	19-May-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W519088	19-May-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W519088	19-May-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W522038	27-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.76		1.0	W520293	20-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.76		1.0	W520293	20-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W520293	20-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W520293	20-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W520265	18-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W521183	21-May-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W520289	15-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W521066	19-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W521129	21-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W520249	15-May-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W520249	15-May-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W520249	15-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W520249	15-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W520249	15-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	0.98	1.00	97.6	85 - 115	W520317	02-Jun-15	
EPA 200.7	Calcium	mg/L	19.5	20.0	97.7	85 - 115	W520317	02-Jun-15	
EPA 200.7	Iron	mg/L	9.83	10.0	98.3	85 - 115	W520317	02-Jun-15	
EPA 200.7	Magnesium	mg/L	19.0	20.0	94.9	85 - 115	W520317	02-Jun-15	
EPA 200.7	Potassium	mg/L	19.8	20.0	98.8	85 - 115	W520317	02-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	10.2	10.7	95.3	85 - 115	W520317	02-Jun-15	
EPA 200.7	Sodium	mg/L	17.9	19.0	94.0	85 - 115	W520317	02-Jun-15	
EPA 200.8	Antimony	mg/L	0.0257	0.0250	103	85 - 115	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0272	0.0250	109	85 - 115	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0280	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0264	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0266	0.0250	106	85 - 115	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0271	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0267	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.0269	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Molybdenum	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0281	0.0250	112	85 - 115	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0270	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0266	0.0250	107	85 - 115	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0250	104	85 - 115	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0269	0.0250	108	85 - 115	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0284	0.0250	114	85 - 115	W519088	19-May-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00496	0.00500	99.2	85 - 115	W522038	27-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	101	99.3	102	85 - 115	W520293	20-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	101	99.3	102	85 - 115	W520293	20-May-15	
SM 2510 B	Specific conductance	µmhos/cm	314	306	103	90 - 110	W521013	18-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.154	0.150	103	90 - 110	W521183	21-May-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.739	0.786	94.0	90 - 110	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.49	2.50	99.8	80 - 120	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	34.6	34.3	101	90 - 110	W521129	21-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.97	3.00	99.1	90 - 110	W520249	15-May-15	
EPA 300.0	Fluoride	mg/L	1.93	2.00	96.6	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	1.97	2.01	98.1	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrite as N	mg/L	2.56	2.51	102	90 - 110	W520249	15-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.75	10.0	97.5	90 - 110	W520249	15-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	178	180	1.0	20	W520293	20-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	178	180	1.0	20	W520293	20-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W520293	20-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W520293	20-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	654	660	0.9	20	W521013	18-May-15	
SM 2540 C	Total Diss. Solids	mg/L	721	722	0.1	10	W520265	18-May-15	
SM 2540 C	Total Diss. Solids	mg/L	742	734	1.1	10	W520265	18-May-15	
SM 4500 H B	pH	pH Units	7.95	8.02	0.9	20	W520293	20-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.08	<0.036	1.00	108	70 - 130	W520317	02-Jun-15	
EPA 200.7	Aluminum	mg/L	1.08	<0.036	1.00	108	70 - 130	W520317	02-Jun-15	
EPA 200.7	Calcium	mg/L	81.5	61.5	20.0	100	70 - 130	W520317	02-Jun-15	
EPA 200.7	Calcium	mg/L	146	127	20.0	94.5	70 - 130	W520317	02-Jun-15	M3
EPA 200.7	Iron	mg/L	10.3	<0.026	10.0	103	70 - 130	W520317	02-Jun-15	
EPA 200.7	Iron	mg/L	13.5	3.20	10.0	103	70 - 130	W520317	02-Jun-15	
EPA 200.7	Magnesium	mg/L	29.4	9.18	20.0	101	70 - 130	W520317	02-Jun-15	
EPA 200.7	Magnesium	mg/L	43.6	23.6	20.0	99.9	70 - 130	W520317	02-Jun-15	
EPA 200.7	Potassium	mg/L	23.1	2.16	20.0	105	70 - 130	W520317	02-Jun-15	
EPA 200.7	Potassium	mg/L	25.8	4.33	20.0	107	70 - 130	W520317	02-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	46.6	35.5	10.7	104	70 - 130	W520317	02-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	59.6	49.2	10.7	97.4	70 - 130	W520317	02-Jun-15	
EPA 200.7	Sodium	mg/L	85.7	66.8	19.0	99.5	70 - 130	W520317	02-Jun-15	
EPA 200.7	Sodium	mg/L	43.1	24.1	19.0	99.8	70 - 130	W520317	02-Jun-15	
EPA 200.8	Antimony	mg/L	0.0248	0.00041	0.0250	97.6	70 - 130	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0302	0.00036	0.0250	119	70 - 130	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0678	0.0436	0.0250	96.7	70 - 130	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0267	<0.000048	0.0250	107	70 - 130	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.113	0.0902	0.0250	92.1	70 - 130	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	108	70 - 130	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0288	0.0033	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0264	0.00089	0.0250	102	70 - 130	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0256	0.00070	0.0250	99.6	70 - 130	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0250	0.00049	0.0250	98.0	70 - 130	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.502	0.490	0.0250	R > 4S	70 - 130	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0302	0.00414	0.0250	104	70 - 130	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0298	0.0048	0.0250	100	70 - 130	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0333	0.0014	0.0250	128	70 - 130	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0248	<0.000021	0.0250	99.1	70 - 130	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0249	<0.000026	0.0250	99.5	70 - 130	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0262	0.00127	0.0250	99.7	70 - 130	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0277	0.0013	0.0250	106	70 - 130	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0336	0.0057	0.0250	111	70 - 130	W519088	19-May-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W522038	27-May-15	
EPA 245.1	Mercury	mg/L	0.00097	<0.00004	0.00100	97.0	70 - 130	W522038	27-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0930	<0.0025	0.100	93.0	75 - 125	W521183	21-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.513	0.016	0.500	99.5	75 - 125	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.74	0.48	2.50	90.1	80 - 120	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.5	<0.24	50.0	103	80 - 120	W521129	21-May-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	61.7	59.7	3.00	R > 4S	90 - 110	W520249	15-May-15	D2,M3
EPA 300.0	Chloride	mg/L	28.9	25.6	3.00	109	90 - 110	W520249	18-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.23	0.311	2.00	96.1	90 - 110	W520249	15-May-15	
EPA 300.0	Fluoride	mg/L	2.21	0.224	2.00	99.1	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	4.96	2.76	2.00	110	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	3.55	1.39	2.00	108	90 - 110	W520249	15-May-15	
EPA 300.0	Nitrite as N	mg/L	2.65	<0.014	2.00	133	90 - 110	W520249	15-May-15	M1
EPA 300.0	Nitrite as N	mg/L	1.94	<0.014	2.00	97.0	90 - 110	W520249	15-May-15	
EPA 300.0	Sulfate as SO4	mg/L	63.6	53.2	10.0	105	90 - 110	W520249	15-May-15	D2,M3
EPA 300.0	Sulfate as SO4	mg/L	58.9	49.7	10.0	92.2	90 - 110	W520249	18-May-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.04	1.08	1.00	104	3.8	20	W520317	02-Jun-15	
EPA 200.7	Calcium	mg/L	81.2	81.5	20.0	98.8	0.3	20	W520317	02-Jun-15	
EPA 200.7	Iron	mg/L	10.2	10.3	10.0	102	1.3	20	W520317	02-Jun-15	
EPA 200.7	Magnesium	mg/L	29.2	29.4	20.0	100	0.7	20	W520317	02-Jun-15	
EPA 200.7	Potassium	mg/L	23.0	23.1	20.0	104	0.4	20	W520317	02-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	46.3	46.6	10.7	101	0.7	20	W520317	02-Jun-15	
EPA 200.7	Sodium	mg/L	85.3	85.7	19.0	97.5	0.5	20	W520317	02-Jun-15	
EPA 200.8	Antimony	mg/L	0.0260	0.0248	0.0250	102	4.6	20	W519088	19-May-15	
EPA 200.8	Arsenic	mg/L	0.0305	0.0302	0.0250	120	0.8	20	W519088	19-May-15	
EPA 200.8	Barium	mg/L	0.0701	0.0678	0.0250	106	3.4	20	W519088	19-May-15	
EPA 200.8	Beryllium	mg/L	0.0269	0.0267	0.0250	107	0.7	20	W519088	19-May-15	
EPA 200.8	Boron	mg/L	0.114	0.113	0.0250	93.3	0.3	20	W519088	19-May-15	
EPA 200.8	Cadmium	mg/L	0.0275	0.0269	0.0250	110	2.1	20	W519088	19-May-15	
EPA 200.8	Chromium	mg/L	0.0298	0.0288	0.0250	106	3.3	20	W519088	19-May-15	
EPA 200.8	Cobalt	mg/L	0.0268	0.0264	0.0250	104	1.6	20	W519088	19-May-15	
EPA 200.8	Copper	mg/L	0.0262	0.0256	0.0250	102	2.2	20	W519088	19-May-15	
EPA 200.8	Lead	mg/L	0.0252	0.0250	0.0250	99.0	1.1	20	W519088	19-May-15	
EPA 200.8	Manganese	mg/L	0.515	0.502	0.0250	100	2.7	20	W519088	19-May-15	M3
EPA 200.8	Molybdenum	mg/L	0.0307	0.0302	0.0250	106	1.4	20	W519088	19-May-15	
EPA 200.8	Nickel	mg/L	0.0301	0.0298	0.0250	101	1.3	20	W519088	19-May-15	
EPA 200.8	Selenium	mg/L	0.0326	0.0333	0.0250	125	2.3	20	W519088	19-May-15	
EPA 200.8	Silver	mg/L	0.0249	0.0248	0.0250	99.7	0.6	20	W519088	19-May-15	
EPA 200.8	Thallium	mg/L	0.0251	0.0249	0.0250	100	0.8	20	W519088	19-May-15	
EPA 200.8	Uranium	mg/L	0.0261	0.0262	0.0250	99.3	0.4	20	W519088	19-May-15	
EPA 200.8	Vanadium	mg/L	0.0280	0.0277	0.0250	107	0.8	20	W519088	19-May-15	
EPA 200.8	Zinc	mg/L	0.0355	0.0336	0.0250	119	5.5	20	W519088	19-May-15	
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00098	0.00099	0.00100	98.0	1.0	20	W522038	27-May-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0900	0.0930	0.100	90.0	3.3	20	W521183	21-May-15	

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Project Name: Gunnison Copper 2015
Work Order: **W5E0321**
Reported: 05-Jun-15 09:43

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)											
SM 4500-P-E	Orthophosphate as P	mg/L	0.511	0.513	0.500	99.1	0.4	20	W520289	15-May-15	
SM 4500-S-F	Sulfide	mg/L	2.66	2.74	2.50	86.9	3.0	20	W521066	19-May-15	
SM 5310B	Total Organic Carbon	mg/L	51.3	51.5	50.0	103	0.4	20	W521129	21-May-15	
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	62.3	61.7	3.00	R > 4S	1.0	20	W520249	15-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	2.26	2.23	2.00	97.5	1.2	20	W520249	15-May-15	
EPA 300.0	Nitrate as N	mg/L	5.01	4.96	2.00	113	1.1	20	W520249	15-May-15	M1
EPA 300.0	Nitrite as N	mg/L	2.69	2.65	2.00	134	1.2	20	W520249	15-May-15	M1
EPA 300.0	Sulfate as SO4	mg/L	64.2	63.6	10.0	R > 4S	0.9	20	W520249	15-May-15	D2,M3

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915	**Sampling Time**	7:00 PM		
Matrix	Water	**Sample Location**	W5E0442-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	5/27/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
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Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915	**Sampling Time**	7:00 PM		
Matrix	Water	**Sample Location**	W5E0442-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915	**Sampling Time**	7:00 PM		
Matrix	Water	**Sample Location**	W5E0442-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Toluene	3.51	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150522037-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	99.8	70-130
Bromofluorobenzene	EPA 524.3	96.8	70-130
Toluene-d8	EPA 524.3	99.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001A	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915 DUPLICATE	**Sampling Time**	7:00 PM		
Matrix	Water	**Sample Location**	W5E0442-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	6/2/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001A	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915 DUPLICATE	**Sampling Time**	7:00 PM		
Matrix	Water	**Sample Location**	W5E0442-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001A	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015	11:55 AM
Client Sample ID	NSH-021C-051915 DUPLICATE	**Sampling Time**	7:00 PM			
Matrix	Water	**Sample Location**	W5E0442-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Toluene	3.24	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150522037-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.4	70-130
Bromofluorobenzene	EPA 524.3	91.8	70-130
Toluene-d8	EPA 524.3	97.2	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-002	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0442-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Acetone	16.9	ug/L	0.5	2.5	5/27/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-002	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0442-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

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Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-002	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015	11:55 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0442-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	5/27/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150522037-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.2	70-130
Bromofluorobenzene	EPA 524.3	96.8	70-130
Toluene-d8	EPA 524.3	96.8	70-130

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	11.3	ug/L	10	113.0	70-130	5/27/2015	5/27/2015
Toluene	10.3	ug/L	10	103.0	70-130	5/27/2015	5/27/2015
Tetrachloroethene	8.93	ug/L	10	89.3	70-130	5/27/2015	5/27/2015
Ethylbenzene	8.35	ug/L	10	83.5	70-130	5/27/2015	5/27/2015
Chlorobenzene	9.09	ug/L	10	90.9	70-130	5/27/2015	5/27/2015
Benzene	10.5	ug/L	10	105.0	70-130	5/27/2015	5/27/2015
1,1-Dichloroethene	10.9	ug/L	10	109.0	70-130	5/27/2015	5/27/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150521006-003	Trichloroethene	ND	11.8	ug/L	10	118.0	70-130	5/27/2015	5/27/2015
150521006-003	Toluene	ND	11.9	ug/L	10	119.0	70-130	5/27/2015	5/27/2015
150521006-003	Tetrachloroethene	ND	7.79	ug/L	10	77.9	70-130	5/27/2015	5/27/2015
150521006-003	Ethylbenzene	ND	9.19	ug/L	10	91.9	70-130	5/27/2015	5/27/2015
150521006-003	Chlorobenzene	ND	9.71	ug/L	10	97.1	70-130	5/27/2015	5/27/2015
150521006-003	Benzene	ND	11.7	ug/L	10	117.0	70-130	5/27/2015	5/27/2015
150521006-003	1,1-Dichloroethene	ND	12.6	ug/L	10	126.0	70-130	5/27/2015	5/27/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	11.4	ug/L	10	114.0	3.4	0-30	5/27/2015	5/27/2015
Toluene	12.0	ug/L	10	120.0	0.8	0-30	5/27/2015	5/27/2015
Tetrachloroethene	7.89	ug/L	10	78.9	1.3	0-30	5/27/2015	5/27/2015
Ethylbenzene	9.38	ug/L	10	93.8	2.0	0-30	5/27/2015	5/27/2015
Chlorobenzene	9.94	ug/L	10	99.4	2.3	0-30	5/27/2015	5/27/2015
Benzene	11.1	ug/L	10	111.0	5.3	0-30	5/27/2015	5/27/2015
1,1-Dichloroethene	12.3	ug/L	10	123.0	2.4	0-30	5/27/2015	5/27/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,1-Dichloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,1-Dichloroethene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,1-dichloropropene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2-Dichloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,2-Dichloropropane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
1,3-Dichloropropane	ND	ug/L	0.5	5/27/2015	5/27/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
2,2-Dichloropropane	ND	ug/L	0.5	5/27/2015	5/27/2015
2-Chlorotoluene	ND	ug/L	0.5	5/27/2015	5/27/2015
4-Chlorotoluene	ND	ug/L	0.5	5/27/2015	5/27/2015
Acetone	ND	ug/L	2.5	5/27/2015	5/27/2015
Benzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Bromobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Bromochloromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Bromodichloromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Bromoform	ND	ug/L	0.5	5/27/2015	5/27/2015
Bromomethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Carbon Tetrachloride	ND	ug/L	0.5	5/27/2015	5/27/2015
Chlorobenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Chloroethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Chloroform	ND	ug/L	0.5	5/27/2015	5/27/2015
Chloromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	5/27/2015	5/27/2015
Dibromochloromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Dibromomethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Dichlorodifluoromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Ethylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015

Comments:

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	5/27/2015	5/27/2015
Isopropylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Methylene chloride	ND	ug/L	0.5	5/27/2015	5/27/2015
Naphthalene	ND	ug/L	0.5	5/27/2015	5/27/2015
n-Butylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
n-Propylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
p-isopropyltoluene	ND	ug/L	0.5	5/27/2015	5/27/2015
sec-Butylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Styrene	ND	ug/L	0.5	5/27/2015	5/27/2015
tert-Butylbenzene	ND	ug/L	0.5	5/27/2015	5/27/2015
Tetrachloroethene	ND	ug/L	0.5	5/27/2015	5/27/2015
Toluene	ND	ug/L	0.5	5/27/2015	5/27/2015
Total Xylene	ND	ug/L	0.5	5/27/2015	5/27/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/27/2015	5/27/2015
Trichloroethene	ND	ug/L	0.5	5/27/2015	5/27/2015
Trichlorofluoromethane	ND	ug/L	0.5	5/27/2015	5/27/2015
Vinyl Chloride	ND	ug/L	0.5	5/27/2015	5/27/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.3	ug/L	10	103.0	70-130	6/2/2015	6/2/2015
Toluene	10.5	ug/L	10	105.0	70-130	6/2/2015	6/2/2015
Tetrachloroethene	10.0	ug/L	10	100.0	70-130	6/2/2015	6/2/2015
Ethylbenzene	10.5	ug/L	10	105.0	70-130	6/2/2015	6/2/2015
Chlorobenzene	9.98	ug/L	10	99.8	70-130	6/2/2015	6/2/2015
Benzene	10.6	ug/L	10	106.0	70-130	6/2/2015	6/2/2015
1,1-Dichloroethene	10.7	ug/L	10	107.0	70-130	6/2/2015	6/2/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	11.1	ug/L	10	111.0	7.5	0-30	6/2/2015	6/2/2015
Toluene	10.4	ug/L	10	104.0	1.0	0-30	6/2/2015	6/2/2015
Tetrachloroethene	10.9	ug/L	10	109.0	8.6	0-30	6/2/2015	6/2/2015
Ethylbenzene	9.74	ug/L	10	97.4	7.5	0-30	6/2/2015	6/2/2015
Chlorobenzene	9.82	ug/L	10	98.2	1.6	0-30	6/2/2015	6/2/2015
Benzene	10.5	ug/L	10	105.0	0.9	0-30	6/2/2015	6/2/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	2.8	0-30	6/2/2015	6/2/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150527014-001	Trichloroethene	ND	8.13	ug/L	10	81.3	70-130	6/2/2015	6/2/2015
150527014-001	Toluene	ND	8.73	ug/L	10	87.3	70-130	6/2/2015	6/2/2015
150527014-001	Tetrachloroethene	ND	7.86	ug/L	10	78.6	70-130	6/2/2015	6/2/2015
150527014-001	Ethylbenzene	ND	8.55	ug/L	10	85.5	70-130	6/2/2015	6/2/2015
150527014-001	Chlorobenzene	ND	8.75	ug/L	10	87.5	70-130	6/2/2015	6/2/2015
150527014-001	Benzene	ND	8.53	ug/L	10	85.3	70-130	6/2/2015	6/2/2015
150527014-001	1,1-Dichloroethene	ND	8.64	ug/L	10	86.4	70-130	6/2/2015	6/2/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015

Comments:

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Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-Dichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-Dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-dichloropropene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
2,2-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
2-Chlorotoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
4-Chlorotoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
Acetone	ND	ug/L	2.5	6/2/2015	6/2/2015
Benzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromochloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromodichloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromoform	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromomethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Carbon Tetrachloride	ND	ug/L	0.5	6/2/2015	6/2/2015
Chlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloroform	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Dibromochloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Dibromomethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Dichlorodifluoromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Ethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015

Comments:

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Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	6/2/2015	6/2/2015
Isopropylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Methylene chloride	ND	ug/L	0.5	6/2/2015	6/2/2015
Naphthalene	ND	ug/L	0.5	6/2/2015	6/2/2015
n-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
n-Propylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
p-isopropyltoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
sec-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Styrene	ND	ug/L	0.5	6/2/2015	6/2/2015
tert-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Tetrachloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Toluene	ND	ug/L	0.5	6/2/2015	6/2/2015
Total Xylene	ND	ug/L	0.5	6/2/2015	6/2/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Trichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Trichlorofluoromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Vinyl Chloride	ND	ug/L	0.5	6/2/2015	6/2/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

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Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015 11:55 AM
Client Sample ID	NSH-021C-051915	**Sampling Time**	7:00 PM	**Extraction Date**	5/26/2015
Matrix	Water	**Sample Location**	W5E0442-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U

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Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Sample Number	150522037-001	**Sampling Date**	5/19/2015	**Date/Time Received**	5/22/2015	11:55 AM
Client Sample ID	NSH-021C-051915	**Sampling Time**	7:00 PM	**Extraction Date**	5/26/2015	
Matrix	Water	**Sample Location**	W5E0442-01			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Naphthalene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Phenanthrene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	5/29/2015	BMM	EPA 8270D	U

Surrogate Data

Sample Number 150522037-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	71.5	10-125

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.93	ug/L	5	78.6	60-137	5/26/2015	5/29/2015
Acenaphthene	2.95	ug/L	5	59.0	58-118	5/26/2015	5/29/2015
Acenaphthylene	2.93	ug/L	5	58.6	52-124	5/26/2015	5/29/2015
Anthracene	3.50	ug/L	5	70.0	59-122	5/26/2015	5/29/2015
Benzo(ghi)perylene	3.76	ug/L	5	75.2	50-136	5/26/2015	5/29/2015
Benzo[a]anthracene	4.61	ug/L	5	92.2	71-124	5/26/2015	5/29/2015
Benzo[a]pyrene	3.54	ug/L	5	70.8	53-133	5/26/2015	5/29/2015
2-Methylnaphthalene	3.24	ug/L	5	64.8	56-128	5/26/2015	5/29/2015
Benzo[k]fluoranthene	3.81	ug/L	5	76.2	50-143	5/26/2015	5/29/2015
Pyrene	4.15	ug/L	5	83.0	53-130	5/26/2015	5/29/2015
Dibenz[a,h]anthracene	3.90	ug/L	5	78.0	52-140	5/26/2015	5/29/2015
Fluoranthene	4.08	ug/L	5	81.6	57-134	5/26/2015	5/29/2015
Fluorene	3.15	ug/L	5	63.0	61-123	5/26/2015	5/29/2015
Indeno[1,2,3-cd]pyrene	3.86	ug/L	5	77.2	51-137	5/26/2015	5/29/2015
Naphthalene	2.93	ug/L	5	58.6	53-120	5/26/2015	5/29/2015
Phenanthrene	3.54	ug/L	5	70.8	60-124	5/26/2015	5/29/2015
Benzo[b]fluoranthene	3.82	ug/L	5	76.4	60-139	5/26/2015	5/29/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	3.83	ug/L	5	76.6	2.6	0-50	5/26/2015	5/29/2015
Acenaphthene	3.37	ug/L	5	67.4	13.3	0-50	5/26/2015	5/29/2015
Acenaphthylene	3.30	ug/L	5	66.0	11.9	0-50	5/26/2015	5/29/2015
Anthracene	3.60	ug/L	5	72.0	2.8	0-50	5/26/2015	5/29/2015
Benzo(ghi)perylene	3.59	ug/L	5	71.8	4.6	0-50	5/26/2015	5/29/2015
Benzo[a]anthracene	4.48	ug/L	5	89.6	2.9	0-50	5/26/2015	5/29/2015
Benzo[a]pyrene	3.47	ug/L	5	69.4	2.0	0-50	5/26/2015	5/29/2015
2-Methylnaphthalene	3.66	ug/L	5	73.2	12.2	0-50	5/26/2015	5/29/2015
Benzo[k]fluoranthene	3.65	ug/L	5	73.0	4.3	0-50	5/26/2015	5/29/2015
Pyrene	4.08	ug/L	5	81.6	1.7	0-50	5/26/2015	5/29/2015
Dibenz[a,h]anthracene	3.70	ug/L	5	74.0	5.3	0-50	5/26/2015	5/29/2015
Fluoranthene	4.06	ug/L	5	81.2	0.5	0-50	5/26/2015	5/29/2015
Fluorene	3.60	ug/L	5	72.0	13.3	0-50	5/26/2015	5/29/2015
Indeno[1,2,3-cd]pyrene	3.67	ug/L	5	73.4	5.0	0-50	5/26/2015	5/29/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150522037
Project Name: SVL #W5E0442

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.34	ug/L	5	66.8	13.1	0-50	5/26/2015	5/29/2015
Phenanthrene	3.64	ug/L	5	72.8	2.8	0-50	5/26/2015	5/29/2015
Benzo[b]fluoranthene	3.80	ug/L	5	76.0	0.5	0-50	5/26/2015	5/29/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	5/26/2015	5/29/2015
Acenaphthene	ND	ug/L	0.01	5/26/2015	5/29/2015
Acenaphthylene	ND	ug/L	0.01	5/26/2015	5/29/2015
Anthracene	ND	ug/L	0.01	5/26/2015	5/29/2015
Benzo(ghi)perylene	ND	ug/L	0.01	5/26/2015	5/29/2015
Benzo[a]anthracene	ND	ug/L	0.01	5/26/2015	5/29/2015
Benzo[a]pyrene	ND	ug/L	0.01	5/26/2015	5/29/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	5/26/2015	5/29/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	5/26/2015	5/29/2015
Chrysene	ND	ug/L	0.01	5/26/2015	5/29/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	5/26/2015	5/29/2015
Fluoranthene	ND	ug/L	0.01	5/26/2015	5/29/2015
Fluorene	ND	ug/L	0.01	5/26/2015	5/29/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	5/26/2015	5/29/2015
Naphthalene	ND	ug/L	0.01	5/26/2015	5/29/2015
Phenanthrene	ND	ug/L	0.01	5/26/2015	5/29/2015
Pyrene	ND	ug/L	0.01	5/26/2015	5/29/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150522037
Order Date: 5/22/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0442
Comment:

Sample #: 150522037-001 **Customer Sample #:** NSH-021C-051915

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/19/2015
Quantity: 4 **Date Received:** 5/22/2015 11:55:00 AM **Time Collected:** 7:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	6/4/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	6/4/2015	***Normal (~10 Days)***

Sample #: 150522037-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/19/2015
Quantity: 1 **Date Received:** 5/22/2015 11:55:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	6/4/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	2.8
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0442

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 3.6

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN ST #545
PHOENIX AZ 85004
Phone Number: 602 - 760 - 2450
FAX Number:
E-mail:

Invoice Sent To: GUNNISON COPPER PROJECT
Contact: REBECCA SAWYER
Address: 2999 N 44TH ST #330
PHOENIX AZ 85018
Phone Number: 520 - 368 - 1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: [signature]

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) Zn Ac	METALS (Dissolve)	SILICA (Dissolved)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	VOCs (524.3)	TOC, PAHs	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-02IC-051915	5/19/15	1900	KF	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		METALS + SILICA SAMPLE WAS FIELD FILTERED WITH A 0.45 µm DISPOSABLE GROUNDWATER FILTER + PRESERVED WITH HNO_3.
2																									
3	TRIP BLANK					1															X				
4																									
5																									
6																									SHIPPED UPS AIR
7																									1Z 9X8 989 23 1001
8																									258 8
9																									
10																									

Relinquished by: [signature]	Date: 5/20/15	Time: 1300	Received by: [signature]	Date: 5-21-15	Time: 10:10
Relinquished by: [signature]	Date: 5-21-15	Time: 1253	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

Wednesday, June 24, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1505478
Project Name:
Project Number: 5E0442

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 5/27/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1505478

Gross Alpha/Beta:

The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met..

Radium-228:

The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724.

All acceptance criteria were met.

Radium-226:

The sample was prepared and analyzed according to the current revision of SOP 783

All acceptance criteria were met.

.

Isotopic Uranium:

The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

All acceptance criteria were met, with the following exception:

Uranium-235 activity is reported in method blank AS150609-2MB above the minimum detectable concentration value. The measured blank activity is below the requested MDC. Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1505478
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0442
Client PO Number: 15340

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-021C-051915	1505478-1		WATER	19-May-15	19:00

ALS

1505478

Page 1 of 1

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SE0442

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: Same
Address:
Phone Number:
FAX Number:
PO#: 15340

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross α/β 900.0	RAD 226/228 903.1/904	U 234/235/238 ASTM D3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																	Call Chris Meyer with Questions
① 1	NSH-021C-051915	5/19/15	1100	KF	2	3			X					X	X	X		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by: L Jacobson Date: 5-21-15 Time: 1130 Received by: Eirpeth Date: 5/27/15 Time: 1015
Relinquished by: Date: Time: Received by: Date: Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1505478

Project Manager: JRK Initials: ECP Date: 5/27/15

1.	Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2.	Are custody seals on shipping containers intact?	NONE	(YES)	NO
3.	Are Custody seals on sample containers intact?	(NONE)	YES	NO
4.	Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5.	Are the COC and bottle labels complete and legible?		(YES)	NO
6.	Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7.	Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8.	Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9.	Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10.	Is there sufficient sample for the requested analyses?		(YES)	NO
11.	Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12.	Are all samples within holding times for the requested analyses?		(YES)	NO
13.	Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____> green pea	(N/A)	YES	NO
15.	Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____heavy	N/A	YES	(NO)
16.	Were the samples shipped on ice?		YES	(NO)
17.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	(NO)

Cooler #:	1							
Temperature (°C):	AMB							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 5-27-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

1505478

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

12 LBS

1 OF 1

DWT: 14,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4368 3919

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

SEE NOTICE ON REVERSE regarding UPS Terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

KRD R 0215

(18) 784

Client: SVL Analytical
Project: 5E0442
Sample ID: NSH-021C-051915
Legal Location:
Collection Date: 5/19/2015 19:00

Date: *24-Jun-15*
Work Order: 1505478
Lab ID: 1505478-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**		Prep Date: **6/10/2015**		PrepBy: **DKL**
GROSS ALPHA	**14.6 (+/- 2.5)**		**0.7**	**pCi/l**	NA	6/15/2015 12:35
GROSS BETA	**19.7 (+/- 3.3)**		**1.1**	**pCi/l**	NA	6/15/2015 12:35
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**		Prep Date: **6/9/2015**		PrepBy: **TDE**
Tracer: U-232	*83.8*		*30-110*	*%REC*	DL = NA	6/11/2015 14:33
U-234	**9.1 (+/- 1.6)**		**0.1**	**pCi/l**	NA	6/11/2015 14:33
U-235	**0.26 (+/- 0.13)**		**0.1**	**pCi/l**	NA	6/11/2015 14:33
U-238	**8.8 (+/- 1.6)**		**0.1**	**pCi/l**	NA	6/11/2015 14:33
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**		Prep Date: **6/16/2015**		PrepBy: **PJW**
Ra-226	**2.3 (+/- 0.67)**		**0.21**	**pCi/l**	NA	6/23/2015 13:42
Carr: BARIUM	*92.7*		*40-110*	*%REC*	DL = NA	6/23/2015 13:42
Radium-228 Analysis by GFPC		**PAI 724**		Prep Date: **6/10/2015**		PrepBy: **DKL**
Ra-228	ND (+/- 0.24)	U	0.46	pCi/l	NA	6/16/2015 09:15
Carr: BARIUM	*92.7*		*40-110*	*%REC*	DL = NA	6/16/2015 09:15

Client:	SVL Analytical	**Date:**	*24-Jun-15*
Project:	5E0442	**Work Order:**	1505478
Sample ID:	NSH-021C-051915	**Lab ID:**	1505478-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/19/2015 19:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1505478
Project: 5E0442

Date: *6/24/2015 3:50:*

QC BATCH REPORT

Batch ID: **RE150616-1-1** Instrument ID: **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 13:42**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27 (+/- 6.8)	0.2	30.71		87.8	67-120					P
Carr: BARIUM	32990		35560		92.8	40-110					

LCSD Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 14:21**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	26.1 (+/- 6.7)	0.3	30.71		85.1	67-120		27	0.09	2.1	P
Carr: BARIUM	32240		35550		90.7	40-110		32990			

MB Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 13:42**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.16									U
Carr: BARIUM	33540		35540		94.4	40-110					

The following samples were analyzed in this batch: 1505478-1

Client: SVL Analytical
Work Order: 1505478
Project: 5E0442

QC BATCH REPORT

Batch ID: **AS150609-2-3** Instrument ID: **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.88 (+/- 0.85)	0.04	4.416		111	82-122					P
U-238	5.29 (+/- 0.92)	0.03	4.585		115	78-126					P
Tracer: U-232	3.63	0.05	4.164		87.3	30-110					

MB Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.03									U
U-235	0.016 (+/- 0.02)	0.014									B3
U-238	ND	0.03									U
Tracer: U-232	3.66	0.04	4.164		87.8	30-110					

The following samples were analyzed in this batch: 1505478-1

Client: SVL Analytical
Work Order: 1505478
Project: 5E0442

QC BATCH REPORT

Batch ID: **AB150610-2-4** Instrument ID: **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150610-2** Units: **pCi/l** Analysis Date: **6/15/2015 09:43**

Client ID: Run ID: **AB150610-2A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	236 (+/- 39)	3	224.2		105	70-130					P,M3
GROSS BETA	200 (+/- 33)	6	203.4		98.2	70-130					P,M3

MB Sample ID: **AB150610-2** Units: **pCi/l** Analysis Date: **6/16/2015 15:57**

Client ID: Run ID: **AB150610-2A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.7									U
GROSS BETA	ND	1.03									U

The following samples were analyzed in this batch: 1506042-1 1505478-1

Client: SVL Analytical
Work Order: 1505478
Project: 5E0442

QC BATCH REPORT

Batch ID: **RA150610-1-1** Instrument ID: **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150610-1** Units: **pCi/l** Analysis Date: **6/16/2015 09:15**

Client ID: Run ID: **RA150610-1A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7 (+/- 1.7)	0.5	7.708		90.6	70-130					P
Carr: BARIUM	32990		35560		92.8	40-110					

MB Sample ID: **RA150610-1** Units: **pCi/l** Analysis Date: **6/16/2015 09:15**

Client ID: Run ID: **RA150610-1A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.47									U
Carr: BARIUM	33540		35540		94.4	40-110					

The following samples were analyzed in this batch: 1505478-1

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-021C-051915	W5E0442-01	Ground Water	19-May-15 19:00	KF	21-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Client Sample ID: **NSH-021C-051915**
SVL Sample ID: **W5E0442-01 (Ground Water)**

Sampled: 19-May-15 19:00
Received: 21-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W521234	AS	06/09/15 10:46	U
EPA 200.7	**Calcium**	47.5	mg/L	0.100	0.029		W521234	AS	06/09/15 10:46	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W521234	AS	06/09/15 10:46	U
EPA 200.7	**Magnesium**	16.1	mg/L	0.20	0.11		W521234	AS	06/09/15 10:46	
EPA 200.7	**Potassium**	1.89	mg/L	0.50	0.17		W521234	AS	06/09/15 10:46	
EPA 200.7	**Silica (SiO2)**	42.6	mg/L	0.17	0.12		W521234	AS	06/09/15 10:46	
EPA 200.7	**Sodium**	26.6	mg/L	0.50	0.05		W521234	AS	06/09/15 10:46	
EPA 200.8	**Antimony**	0.00045	mg/L	0.00300	0.00019		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Arsenic**	0.00104	mg/L	0.00300	0.00027		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Barium**	0.0341	mg/L	0.00100	0.000099		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Beryllium**	0.00014	mg/L	0.00020	0.000048		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Boron**	0.0384	mg/L	0.0050	0.0012		W521262	KWH	06/02/15 11:52	
EPA 200.8	Cadmium	< 0.000072	mg/L	0.00020	0.000072		W521262	KWH	06/02/15 11:52	U
EPA 200.8	**Chromium**	0.0056	mg/L	0.0015	0.0004		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Cobalt**	0.00013	mg/L	0.00100	0.000054		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Copper**	0.0175	mg/L	0.00100	0.00015		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Lead**	0.00037	mg/L	0.00300	0.000031		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Manganese**	0.00118	mg/L	0.00100	0.000025		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Molybdenum**	0.0558	mg/L	0.00100	0.00009		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Nickel**	0.0017	mg/L	0.0010	0.0004		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Selenium**	0.0027	mg/L	0.0030	0.0006		W521262	KWH	06/02/15 11:52	M1,J
EPA 200.8	**Silver**	0.000055	mg/L	0.000100	0.000021		W521262	KWH	06/02/15 11:52	J
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W521262	KWH	06/02/15 11:52	U
EPA 200.8	**Uranium**	0.0228	mg/L	0.00100	0.000014		W521262	KWH	06/02/15 11:52	
EPA 200.8	**Vanadium**	0.0026	mg/L	0.0030	0.0009		W521262	KWH	06/02/15 11:52	J
EPA 200.8	**Zinc**	0.199	mg/L	0.0050	0.0010		W521262	KWH	06/02/15 11:52	M3
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W522039	STA	05/28/15 14:02	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	179	mg/L as CaCO3	1.0			W521298	DKS	05/26/15 07:56	
SM 2320B	**Bicarbonate**	179	mg/L as CaCO3	1.0			W521298	DKS	05/26/15 07:56	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W521298	DKS	05/26/15 07:56	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W521298	DKS	05/26/15 07:56	U
SM 2510 B	**Specific conductance**	438	µmhos/cm	5.00			W521266	RS	05/26/15 12:05	
SM 2540 C	**Total Diss. Solids**	280	mg/L	10			W522026	RS	05/26/15 14:50	
SM 4500 H B	**pH @22.0°C**	7.77	pH Units				W521298	DKS	05/26/15 07:56	H5
SM 4500-CN-I	Cyanide (WAD)	< 0.0025	mg/L	0.0100	0.0025		W522112	MAD	06/01/15 13:49	U
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W521192	SM	05/21/15 14:29	U
SM 4500-S-F	Sulfide	< 0.39	mg/L	1.00	0.39		W521193	SM	05/22/15 17:01	U
SM 5310B	**Total Organic Carbon**	0.26	mg/L	1.00	0.24		W522064	SM	05/27/15 22:45	J

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Client Sample ID: **NSH-021C-051915**
SVL Sample ID: **W5E0442-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 19-May-15 19:00
Received: 21-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	28.0	mg/L	2.00	0.56	10	W524113	MCE	06/09/15 21:02	D2
EPA 300.0	**Fluoride**	2.81	mg/L	0.100	0.022		W524113	MCE	06/09/15 20:52	
EPA 300.0	**Nitrate as N**	1.52	mg/L	0.050	0.008		W521194	DT	05/21/15 11:31	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W521194	DT	05/21/15 11:31	U
EPA 300.0	**Sulfate as SO4**	15.3	mg/L	0.30	0.05		W524113	MCE	06/09/15 20:52	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.91 meq/L Anion Sum: 4.94 meq/L C/A Balance: -0.31 % Calculated TDS: 295 TDS/cTDS: 0.95 TDS/eC: 0.64

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W521234	09-Jun-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W521234	09-Jun-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W521234	09-Jun-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W521234	09-Jun-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W521234	09-Jun-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W521234	09-Jun-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W521234	09-Jun-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W521262	02-Jun-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W521262	02-Jun-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W521262	02-Jun-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W521262	02-Jun-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W521262	02-Jun-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W521262	02-Jun-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W521262	02-Jun-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W521262	02-Jun-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W521262	02-Jun-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W521262	02-Jun-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W521262	02-Jun-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W521262	02-Jun-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W521262	02-Jun-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W521262	02-Jun-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W521262	02-Jun-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W521262	02-Jun-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W521262	02-Jun-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W521262	02-Jun-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W521262	02-Jun-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W522039	28-May-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.32		1.0	W521298	26-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.32		1.0	W521298	26-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W521298	26-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W521298	26-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W522026	26-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W522112	01-Jun-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W521192	21-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W521193	22-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W522064	27-May-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.24	0.24	1.00	W522064	27-May-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W524113	09-Jun-15	U
EPA 300.0	Fluoride	mg/L	<0.022	0.022	0.100	W524113	09-Jun-15	U
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W521194	21-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W521194	21-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W524113	09-Jun-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.00	1.00	99.7	85 - 115	W521234	09-Jun-15	
EPA 200.7	Calcium	mg/L	19.1	20.0	95.7	85 - 115	W521234	09-Jun-15	
EPA 200.7	Iron	mg/L	9.41	10.0	94.1	85 - 115	W521234	09-Jun-15	
EPA 200.7	Magnesium	mg/L	18.3	20.0	91.5	85 - 115	W521234	09-Jun-15	
EPA 200.7	Potassium	mg/L	19.1	20.0	95.5	85 - 115	W521234	09-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	9.77	10.7	91.3	85 - 115	W521234	09-Jun-15	
EPA 200.7	Sodium	mg/L	17.9	19.0	94.5	85 - 115	W521234	09-Jun-15	
EPA 200.8	Antimony	mg/L	0.0244	0.0250	97.4	85 - 115	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0251	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0256	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0259	0.0250	103	85 - 115	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0247	0.0250	98.8	85 - 115	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0261	0.0250	104	85 - 115	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0243	0.0250	97.3	85 - 115	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0249	0.0250	99.6	85 - 115	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0250	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0256	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0247	0.0250	98.9	85 - 115	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0254	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0247	0.0250	98.9	85 - 115	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0252	0.0250	101	85 - 115	W521262	02-Jun-15	
EPA 200.8	Silver	mg/L	0.0260	0.0250	104	85 - 115	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0255	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0245	0.0250	98.1	85 - 115	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0251	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.0264	0.0250	106	85 - 115	W521262	02-Jun-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00485	0.00500	97.0	85 - 115	W522039	28-May-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	95.1	99.3	95.8	85 - 115	W521298	26-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	95.1	99.3	95.8	85 - 115	W521298	26-May-15	
SM 2510 B	Specific conductance	µmhos/cm	297	306	97.0	90 - 110	W521266	26-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W522112	01-Jun-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.804	0.786	102	90 - 110	W521192	21-May-15	
SM 4500-S-F	Sulfide	mg/L	2.30	2.50	92.1	80 - 120	W521193	22-May-15	
SM 5310B	Total Organic Carbon	mg/L	31.2	34.3	91.1	90 - 110	W522064	27-May-15	
SM 5310B	Total Organic Carbon	mg/L	31.1	34.3	90.6	90 - 110	W522064	27-May-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	3.08	3.00	103	90 - 110	W524113	09-Jun-15	
EPA 300.0	Fluoride	mg/L	1.98	2.00	98.8	90 - 110	W524113	09-Jun-15	
EPA 300.0	Nitrate as N	mg/L	2.02	2.00	101	90 - 110	W521194	21-May-15	
EPA 300.0	Nitrite as N	mg/L	2.62	2.50	105	90 - 110	W521194	21-May-15	
EPA 300.0	Sulfate as SO4	mg/L	10.2	10.0	102	90 - 110	W524113	09-Jun-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	178	179	1.1	20	W521298	26-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	178	179	1.1	20	W521298	26-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W521298	26-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W521298	26-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	434	438	1.0	20	W521266	26-May-15	
SM 2540 C	Total Diss. Solids	mg/L	824	821	0.4	10	W522026	26-May-15	
SM 2540 C	Total Diss. Solids	mg/L	843	826	2.0	10	W522026	26-May-15	
SM 4500 H B	pH	pH Units	7.71	7.77	0.8	20	W521298	26-May-15	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.00	<0.036	1.00	100	70 - 130	W521234	09-Jun-15	
EPA 200.7	Calcium	mg/L	65.7	47.5	20.0	91.1	70 - 130	W521234	09-Jun-15	
EPA 200.7	Iron	mg/L	9.55	<0.026	10.0	95.5	70 - 130	W521234	09-Jun-15	
EPA 200.7	Magnesium	mg/L	34.7	16.1	20.0	92.9	70 - 130	W521234	09-Jun-15	
EPA 200.7	Potassium	mg/L	21.4	1.89	20.0	97.7	70 - 130	W521234	09-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	52.5	42.6	10.7	92.7	70 - 130	W521234	09-Jun-15	
EPA 200.7	Sodium	mg/L	44.5	26.6	19.0	94.1	70 - 130	W521234	09-Jun-15	
EPA 200.8	Antimony	mg/L	0.0253	0.00045	0.0250	99.3	70 - 130	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0316	0.00104	0.0250	122	70 - 130	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0579	0.0341	0.0250	95.0	70 - 130	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0281	0.00014	0.0250	112	70 - 130	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0658	0.0384	0.0250	109	70 - 130	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	107	70 - 130	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0325	0.0056	0.0250	108	70 - 130	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0262	0.00013	0.0250	104	70 - 130	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0428	0.0175	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0253	0.00037	0.0250	99.9	70 - 130	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0276	0.00118	0.0250	106	70 - 130	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0784	0.0558	0.0250	90.6	70 - 130	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0269	0.0017	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0346	0.0027	0.0250	128	70 - 130	W521262	02-Jun-15	
EPA 200.8	Silver	mg/L	0.0251	0.000055	0.0250	100	70 - 130	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0252	<0.000026	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0476	0.0228	0.0250	98.9	70 - 130	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0304	0.0026	0.0250	111	70 - 130	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.233	0.199	0.0250	R > 4S	70 - 130	W521262	02-Jun-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00099	<0.00004	0.00100	99.0	70 - 130	W522039	28-May-15	
EPA 245.1	Mercury	mg/L	0.00100	<0.00004	0.00100	100	70 - 130	W522039	28-May-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	<0.0025	0.100	103	75 - 125	W522112	01-Jun-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.527	0.024	0.500	100	75 - 125	W521192	21-May-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.67	0.40	2.50	90.5	80 - 120	W521193	22-May-15	
SM 5310B	Total Organic Carbon	mg/L	50.5	1.46	50.0	98.0	80 - 120	W522064	27-May-15	
SM 5310B	Total Organic Carbon	mg/L	48.6	0.26	50.0	96.6	80 - 120	W522064	27-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	7.10	3.73	3.00	112	90 - 110	W524113	09-Jun-15	M1
EPA 300.0	Chloride	mg/L	9.22	5.86	3.00	112	90 - 110	W524113	09-Jun-15	M1
EPA 300.0	Fluoride	mg/L	2.14	0.094	2.00	102	90 - 110	W524113	09-Jun-15	
EPA 300.0	Fluoride	mg/L	2.13	0.133	2.00	100	90 - 110	W524113	09-Jun-15	
EPA 300.0	Nitrate as N	mg/L	2.11	0.025	2.00	104	90 - 110	W521194	21-May-15	
EPA 300.0	Nitrite as N	mg/L	2.20	<0.014	2.00	110	90 - 110	W521194	21-May-15	
EPA 300.0	Sulfate as SO4	mg/L	21.6	10.4	10.0	111	90 - 110	W524113	09-Jun-15	M1
EPA 300.0	Sulfate as SO4	mg/L	67.3	57.5	10.0	98.7	90 - 110	W524113	10-Jun-15	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	0.99	1.00	1.00	98.7	1.4	20	W521234	09-Jun-15	
EPA 200.7	Calcium	mg/L	64.7	65.7	20.0	86.1	1.6	20	W521234	09-Jun-15	
EPA 200.7	Iron	mg/L	9.36	9.55	10.0	93.6	2.0	20	W521234	09-Jun-15	
EPA 200.7	Magnesium	mg/L	34.3	34.7	20.0	90.9	1.1	20	W521234	09-Jun-15	
EPA 200.7	Potassium	mg/L	21.2	21.4	20.0	96.7	0.9	20	W521234	09-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	51.7	52.5	10.7	85.4	1.5	20	W521234	09-Jun-15	
EPA 200.7	Sodium	mg/L	43.9	44.5	19.0	90.9	1.4	20	W521234	09-Jun-15	
EPA 200.8	Antimony	mg/L	0.0248	0.0253	0.0250	97.5	1.8	20	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0331	0.0316	0.0250	128	4.8	20	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0580	0.0579	0.0250	95.4	0.2	20	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0291	0.0281	0.0250	116	3.6	20	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0664	0.0658	0.0250	112	1.0	20	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0268	0.0269	0.0250	107	0.1	20	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0332	0.0325	0.0250	110	2.0	20	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0273	0.0262	0.0250	109	4.2	20	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0448	0.0428	0.0250	109	4.4	20	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0257	0.0253	0.0250	101	1.5	20	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0285	0.0276	0.0250	109	3.4	20	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0746	0.0784	0.0250	75.4	5.0	20	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0283	0.0269	0.0250	106	4.9	20	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0371	0.0346	0.0250	138	7.0	20	W521262	02-Jun-15	M1
EPA 200.8	Silver	mg/L	0.0244	0.0251	0.0250	97.5	2.6	20	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0257	0.0252	0.0250	103	2.0	20	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0475	0.0476	0.0250	98.9	0.0	20	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0308	0.0304	0.0250	113	1.4	20	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.255	0.233	0.0250	R > 4S	9.0	20	W521262	02-Jun-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00100	0.00099	0.00100	100	1.0	20	W522039	28-May-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.103	0.100	103	0.0	20	W522112	01-Jun-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.544	0.527	0.500	104	3.2	20	W521192	21-May-15	Q14
SM 4500-S-F	Sulfide	mg/L	2.63	2.67	2.50	88.9	1.5	20	W521193	22-May-15	
SM 5310B	Total Organic Carbon	mg/L	50.7	50.5	50.0	98.4	0.4	20	W522064	27-May-15	
SM 5310B	Total Organic Carbon	mg/L	49.4	48.6	50.0	98.3	1.7	20	W522064	27-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0442**
Reported: 10-Jun-15 14:21

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	7.10	7.10	3.00	112	0.0	20	W524113	09-Jun-15	M1
EPA 300.0	Fluoride	mg/L	2.13	2.14	2.00	102	0.4	20	W524113	09-Jun-15	
EPA 300.0	Nitrate as N	mg/L	1.95	2.11	2.00	96.0	8.0	20	W521194	21-May-15	
EPA 300.0	Nitrite as N	mg/L	2.01	2.20	2.00	101	8.8	20	W521194	21-May-15	
EPA 300.0	Sulfate as SO4	mg/L	23.1	21.6	10.0	127	6.9	20	W524113	09-Jun-15	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
Q14	Sample was colored, a color correction solution was added and then compared to an aliquot of the original sample.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

Thursday, June 25, 2015

Chris Meyer
SVL Analytical
One Government Gulch
Kellogg, ID 83837-0929

Re: ALS Workorder: 1506052
Project Name:
Project Number: 5E0558

Dear Ms. Meyer:

One water sample was received from SVL Analytical, on 6/3/2015. The sample was scheduled for the following analyses:

Gross Alpha/Beta
Isotopic Uranium
Radium-226
Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

1506052

Gross Alpha/Beta:
The sample was analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

All acceptance criteria were met.

Radium-228:
The sample was analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of SOP 724**.**

All acceptance criteria were met.

Radium-226:
The sample was prepared and analyzed according to the current revision of SOP 783**.**

All acceptance criteria were met.

Isotopic Uranium:
The sample was analyzed for the presence of isotopic uranium according to the current revision of SOP 714.

Uranium-235 activity is reported in the associated method blank above the minimum detectable concentration value, as indicated with a “B3” qualifier on the final reports. The measured blank activity is below the requested MDC (pCi/L). Results are acceptable according to the current revision of SOP 715, and are submitted without further qualification.

All remaining acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1506052
Client Name: SVL Analytical
Client Project Name:
Client Project Number: 5E0558
Client PO Number: 15354

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
NSH-024-052715	1506052-1		WATER	27-May-15	9:30

ALS

1506052

Page 1 of 1

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: SE0558

CHAIN OF CUSTODY RECORD

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: SVL Analytical
Contact: Chris Meyer
Address: 1 Government Gulch
Kellogg ID 83837
Phone Number: 208-784-1258
FAX Number: 208-783-0891
E-mail:

Invoice Sent To:
Contact: SAme
Address:
Phone Number:
FAX Number:
PO#: 15354

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: Excelsior

Sampler's Signature:

Indicate State of sample origination: AZ

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Matrix Type (From Table 1)	No. of Containers	Preservative(s): Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify)	Analyses Required: Gross α/β 900.0	RA0226/228 903.1/904	U 234/235/238	ASTM D3972	ASTM D3972	Rush Instructions (Days)	Comments
	Please take care to distinguish between: 1 and I, 2 and Z, 5 and S, Ø and O. Thanks!																			Call Chris Meyer with Questions
1	NSH-024-052715	5/27/15	930	KF	2	3			X					X	X	X		X		
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Relinquished by: L Jacobson Date: 5-28-15 Time: 1238 Received by: SVA
Relinquished by: Date: Time: Received by: Date: 06-03-15 Time: 1005

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: SVL Workorder No: 1506052

Project Manager: JRK Initials: SDM Date: 06-03-15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	NONE	(YES)	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	(N/A)	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	(NO)
16. Were the samples shipped on ice?		YES	(NO)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	NO

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	9							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 6-3-15

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

150605Z

SHIPPING
(208) 784-1258
SVL ANALYTICAL
1 GOVERNMENT GULCH
KELLOGG ID 83837

13 LBS

1 OF 1

DWT: 14,11,16

SHIP TO:
ALS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

9/1

CO 805 0-01

UPS GROUND

TRACKING #: 1Z 9X8 989 03 4507 2834

BILLING: P/P

Description: SUB-CONTRACT

WS 16.0.31

63.0A 04/2015

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RRD R 0215

Client: SVL Analytical
Date: *25-Jun-15*
Project: 5E0558
Work Order: 1506052
Sample ID: NSH-024-052715
Lab ID: 1506052-1
Legal Location:
Matrix: WATER
Collection Date: 5/27/2015 09:30
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gross Alpha/Beta by GFPC		**PAI 724**			Prep Date: **6/10/2015**	PrepBy: **DKL**
GROSS ALPHA	**11.9 (+/- 3.1)**		**2.3**	**pCi/l**	NA	6/15/2015 09:43
GROSS BETA	**19.7 (+/- 4)**		**3.4**	**pCi/l**	NA	6/15/2015 09:43
Isotopic Uranium by Alpha Spectroscopy		**PAI 714**			Prep Date: **6/9/2015**	PrepBy: **TDE**
Tracer: U-232	*89.5*		*30-110*	*%REC*	DL = NA	6/12/2015 07:50
U-234	**3.56 (+/- 0.68)**		**0.05**	**pCi/l**	NA	6/12/2015 07:50
U-235	0.154 (+/- 0.086)	LT	0.03	pCi/l	NA	6/12/2015 07:50
U-238	**3.34 (+/- 0.65)**		**0.08**	**pCi/l**	NA	6/12/2015 07:50
Radium-226 by Radon Emanation - Method 903.1		**PAI 783**			Prep Date: **6/16/2015**	PrepBy: **PJW**
Ra-226	**3.32 (+/- 0.92)**		**0.17**	**pCi/l**	NA	6/23/2015 13:42
Carr: BARIUM	*95.2*		*40-110*	*%REC*	DL = NA	6/23/2015 13:42
Radium-228 Analysis by GFPC		**PAI 724**			Prep Date: **6/10/2015**	PrepBy: **DKL**
Ra-228	0.74 (+/- 0.32)	LT	0.51	pCi/l	NA	6/16/2015 09:15
Carr: BARIUM	*95.2*		*40-110*	*%REC*	DL = NA	6/16/2015 09:15

Client:	SVL Analytical	**Date:**	*25-Jun-15*
Project:	5E0558	**Work Order:**	1506052
Sample ID:	NSH-024-052715	**Lab ID:**	1506052-1
Legal Location:		**Matrix:**	WATER
Collection Date:	5/27/2015 09:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
LT - Result is less than requested MDC but greater than achieved MDC.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Client: SVL Analytical
Work Order: 1506052
Project: 5E0558

Date: *6/25/2015 10:18*

QC BATCH REPORT

Batch ID: **RE150616-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 13:42**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27 (+/- 6.8)	0.2	30.71		87.8	67-120					P
Carr: BARIUM	32990		35560		92.8	40-110					

LCSD Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 14:21**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	26.1 (+/- 6.7)	0.3	30.71		85.1	67-120		27	0.09	2.1	P
Carr: BARIUM	32240		35550		90.7	40-110		32990			

MB Sample ID: **RE150616-1** Units: **pCi/l** Analysis Date: **6/23/2015 13:42**
Client ID: Run ID: **RE150616-1A** Prep Date: **6/16/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.16									U
Carr: BARIUM	33540		35540		94.4	40-110					

The following samples were analyzed in this batch: 1506052-1

Client: SVL Analytical
Work Order: 1506052
Project: 5E0558

QC BATCH REPORT

Batch ID: **AS150609-2-3** Instrument ID **AlphaSpec2** Method: **Isotopic Uranium by Alpha Spec**

LCS Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	4.88 (+/- 0.85)	0.04	4.416		111	82-122					P
U-238	5.29 (+/- 0.92)	0.03	4.585		115	78-126					P
Tracer: U-232	3.63	0.05	4.164		87.3	30-110					

MB Sample ID: **AS150609-2** Units: **pCi/l** Analysis Date: **6/12/2015 07:50**

Client ID: Run ID: **AS150609-2U** Prep Date: **6/9/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
U-234	ND	0.03									U
U-235	0.016 (+/- 0.02)	0.014									B3
U-238	ND	0.03									U
Tracer: U-232	3.66	0.04	4.164		87.8	30-110					

The following samples were analyzed in this batch: 1506052-1

Client: SVL Analytical
Work Order: 1506052
Project: 5E0558

QC BATCH REPORT

Batch ID: **AB150610-2-4** Instrument ID **LB4100-C** Method: **Gross Alpha/Beta by GFPC**

LCS Sample ID: **AB150610-2** Units: **pCi/l** Analysis Date: **6/15/2015 09:43**

Client ID: Run ID: **AB150610-2A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	236 (+/- 39)	3	224.2		105	70-130					P,M3
GROSS BETA	200 (+/- 33)	6	203.4		98.2	70-130					P,M3

MB Sample ID: **AB150610-2** Units: **pCi/l** Analysis Date: **6/16/2015 15:57**

Client ID: Run ID: **AB150610-2A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
GROSS ALPHA	ND	0.7									U
GROSS BETA	ND	1.03									U

The following samples were analyzed in this batch: 1506052-1 1506043-2

Client: SVL Analytical
Work Order: 1506052
Project: 5E0558

QC BATCH REPORT

Batch ID: **RA150610-1-1** Instrument ID **LB4100-C** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA150610-1** Units: **pCi/l** Analysis Date: **6/16/2015 09:15**

Client ID: Run ID: **RA150610-1A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	7 (+/- 1.7)	0.5	7.708		90.6	70-130					P
Carr: BARIUM	32990		35560		92.8	40-110					

MB Sample ID: **RA150610-1** Units: **pCi/l** Analysis Date: **6/16/2015 09:15**

Client ID: Run ID: **RA150610-1A** Prep Date: **6/10/2015** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.47									U
Carr: BARIUM	33540		35540		94.4	40-110					

The following samples were analyzed in this batch: 1506052-1

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715	**Sampling Time**	9:30 AM		
Matrix	Water	**Sample Location**	W5E0558-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	6/2/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715	**Sampling Time**	9:30 AM		
Matrix	Water	**Sample Location**	W5E0558-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromodichloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715	**Sampling Time**	9:30 AM		
Matrix	Water	**Sample Location**	W5E0558-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Styrene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
tert-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Toluene	7.82	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150529010-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	96.4	70-130
Bromofluorobenzene	EPA 524.3	92.6	70-130
Toluene-d8	EPA 524.3	98.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001A	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015	11:25 AM
Client Sample ID	NSH-024-052715 DUPLICATE	**Sampling Time**	9:30 AM			
Matrix	Water	**Sample Location**	W5E0558-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Acetone	ND	ug/L	0.5	2.5	6/2/2015	SAT	EPA 524.3	U
Acrylonitrile	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001A	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015	11:25 AM
Client Sample ID	NSH-024-052715 DUPLICATE	**Sampling Time**	9:30 AM			
Matrix	Water	**Sample Location**	W5E0558-01			
Comments	Sample duplicate					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001A	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715 DUPLICATE	**Sampling Time**	9:30 AM		
Matrix	Water	**Sample Location**	W5E0558-01		
Comments	Sample duplicate				

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Toluene	7.36	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	
Total Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150529010-001A

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.4	70-130
Bromofluorobenzene	EPA 524.3	93.2	70-130
Toluene-d8	EPA 524.3	96.4	70-130

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-002	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015	11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0558-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,1-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2,2-Tetrachloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1,2-Trichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,1-dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,3-Trichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2,4-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dibromoethane (EDB)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3,5-Trimethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,3-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
1,4-Dichlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2,2-Dichloropropane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Butanone	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
2-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
4-Chlorotoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Acetone	29.0	ug/L	0.5	2.5	6/2/2015	SAT	EPA 524.3	
Acrylonitrile	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Benzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-002	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015	11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**				
Matrix	Water	**Sample Location**	W5E0558-02			
Comments						

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Bromodichloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromoform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Bromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon disulfide	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Carbon Tetrachloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chlorobenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloroform	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Chloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,2-dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
cis-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromochloromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dibromomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Dichlorodifluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Diethyl ether	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Ethylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Hexachlorobutadiene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Iodomethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Isopropylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
m+p-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Methylene chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
methyl-t-butyl ether (MTBE)	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Naphthalene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
n-Propylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
o-Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
p-isopropyltoluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
sec-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Styrene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-002	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	TRIP BLANK	**Sampling Time**			
Matrix	Water	**Sample Location**	W5E0558-02		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
tert-Butylbenzene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Tetrachloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Toluene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Total Xylene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,2-Dichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1,3-Dichloropropene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
trans-1-4-Dichloro-2-butene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichloroethene	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Trichlorofluoromethane	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U
Vinyl Chloride	ND	ug/L	0.1	0.5	6/2/2015	SAT	EPA 524.3	U

Surrogate Data

Sample Number 150529010-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 524.3	95.0	70-130
Bromofluorobenzene	EPA 524.3	95.2	70-130
Toluene-d8	EPA 524.3	94.6	70-130

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Trichloroethene	10.3	ug/L	10	103.0	70-130	6/2/2015	6/2/2015
Toluene	10.5	ug/L	10	105.0	70-130	6/2/2015	6/2/2015
Tetrachloroethene	10.0	ug/L	10	100.0	70-130	6/2/2015	6/2/2015
Ethylbenzene	10.5	ug/L	10	105.0	70-130	6/2/2015	6/2/2015
Chlorobenzene	9.98	ug/L	10	99.8	70-130	6/2/2015	6/2/2015
Benzene	10.6	ug/L	10	106.0	70-130	6/2/2015	6/2/2015
1,1-Dichloroethene	10.7	ug/L	10	107.0	70-130	6/2/2015	6/2/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	11.1	ug/L	10	111.0	7.5	0-30	6/2/2015	6/2/2015
Toluene	10.4	ug/L	10	104.0	1.0	0-30	6/2/2015	6/2/2015
Tetrachloroethene	10.9	ug/L	10	109.0	8.6	0-30	6/2/2015	6/2/2015
Ethylbenzene	9.74	ug/L	10	97.4	7.5	0-30	6/2/2015	6/2/2015
Chlorobenzene	9.82	ug/L	10	98.2	1.6	0-30	6/2/2015	6/2/2015
Benzene	10.5	ug/L	10	105.0	0.9	0-30	6/2/2015	6/2/2015
1,1-Dichloroethene	10.4	ug/L	10	104.0	2.8	0-30	6/2/2015	6/2/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150527014-001	Trichloroethene	ND	8.13	ug/L	10	81.3	70-130	6/2/2015	6/2/2015
150527014-001	Toluene	ND	8.73	ug/L	10	87.3	70-130	6/2/2015	6/2/2015
150527014-001	Tetrachloroethene	ND	7.86	ug/L	10	78.6	70-130	6/2/2015	6/2/2015
150527014-001	Ethylbenzene	ND	8.55	ug/L	10	85.5	70-130	6/2/2015	6/2/2015
150527014-001	Chlorobenzene	ND	8.75	ug/L	10	87.5	70-130	6/2/2015	6/2/2015
150527014-001	Benzene	ND	8.53	ug/L	10	85.3	70-130	6/2/2015	6/2/2015
150527014-001	1,1-Dichloroethene	ND	8.64	ug/L	10	86.4	70-130	6/2/2015	6/2/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1-Trichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1,2-Trichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-Dichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-Dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,1-dichloropropene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,3-Trichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,3-Trichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,4-Trichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2,4-Trimethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,2-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3,5-Trimethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
1,3-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
1,4-Dichlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
2,2-Dichloropropane	ND	ug/L	0.5	6/2/2015	6/2/2015
2-Chlorotoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
4-Chlorotoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
Acetone	ND	ug/L	2.5	6/2/2015	6/2/2015
Benzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromochloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromodichloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromoform	ND	ug/L	0.5	6/2/2015	6/2/2015
Bromomethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Carbon Tetrachloride	ND	ug/L	0.5	6/2/2015	6/2/2015
Chlorobenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloroethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloroform	ND	ug/L	0.5	6/2/2015	6/2/2015
Chloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
cis-1,2-dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Dibromochloromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Dibromomethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Dichlorodifluoromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Ethylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALEY AND ALDRICH
Address: 400 E. VAN BUREN ST
PHOENIX, AZ 85004
Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Hexachlorobutadiene	ND	ug/L	0.5	6/2/2015	6/2/2015
Isopropylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Methylene chloride	ND	ug/L	0.5	6/2/2015	6/2/2015
Naphthalene	ND	ug/L	0.5	6/2/2015	6/2/2015
n-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
n-Propylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
p-isopropyltoluene	ND	ug/L	0.5	6/2/2015	6/2/2015
sec-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Styrene	ND	ug/L	0.5	6/2/2015	6/2/2015
tert-Butylbenzene	ND	ug/L	0.5	6/2/2015	6/2/2015
Tetrachloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Toluene	ND	ug/L	0.5	6/2/2015	6/2/2015
Total Xylene	ND	ug/L	0.5	6/2/2015	6/2/2015
trans-1,2-Dichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Trichloroethene	ND	ug/L	0.5	6/2/2015	6/2/2015
Trichlorofluoromethane	ND	ug/L	0.5	6/2/2015	6/2/2015
Vinyl Chloride	ND	ug/L	0.5	6/2/2015	6/2/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715	**Sampling Time**	9:30 AM	**Extraction Date**	06/03/15
Matrix	Water	**Sample Location**	W5E0558-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
2-Methylnaphthalene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Acenaphthene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Acenaphthylene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Anthracene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Benzo(ghi)perylene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Benzo[a]anthracene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Benzo[a]pyrene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Benzo[b]fluoranthene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Benzo[k]fluoranthene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Chrysene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Dibenz[a,h]anthracene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Fluoranthene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Fluorene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Attn: LAUREN CANDREVA

Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Sample Number	150529010-001	**Sampling Date**	5/27/2015	**Date/Time Received**	5/29/2015 11:25 AM
Client Sample ID	NSH-024-052715	**Sampling Time**	9:30 AM	**Extraction Date**	06/03/15
Matrix	Water	**Sample Location**	W5E0558-01		
Comments					

Parameter	Result	Units	MDL	PQL	Analysis Date	Analyst	Method	Qualifier
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Naphthalene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Phenanthrene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U
Pyrene	ND	ug/L	0.005	0.01	6/5/2015	BMM	EPA 8270D	U

Surrogate Data

Sample Number 150529010-001

Surrogate Standard	Method	Percent Recovery	Control Limits
Terphenyl-d14	EPA 8270D	88.1	10-125

Authorized Signature

John Coddington, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit
U	Compound was analyzed for but not detected

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Chrysene	3.68	ug/L	5	73.6	60-137	6/3/2015	6/5/2015
Acenaphthene	3.10	ug/L	5	62.0	58-118	6/3/2015	6/5/2015
Acenaphthylene	3.01	ug/L	5	60.2	52-124	6/3/2015	6/5/2015
Anthracene	3.43	ug/L	5	68.6	59-122	6/3/2015	6/5/2015
Benzo(ghi)perylene	3.54	ug/L	5	70.8	50-136	6/3/2015	6/5/2015
Benzo[a]anthracene	4.28	ug/L	5	85.6	71-124	6/3/2015	6/5/2015
Benzo[a]pyrene	3.39	ug/L	5	67.8	53-133	6/3/2015	6/5/2015
2-Methylnaphthalene	3.70	ug/L	5	74.0	56-128	6/3/2015	6/5/2015
Benzo[k]fluoranthene	3.49	ug/L	5	69.8	50-143	6/3/2015	6/5/2015
Pyrene	3.85	ug/L	5	77.0	53-130	6/3/2015	6/5/2015
Dibenz[a,h]anthracene	3.66	ug/L	5	73.2	52-140	6/3/2015	6/5/2015
Fluoranthene	3.81	ug/L	5	76.2	57-134	6/3/2015	6/5/2015
Fluorene	3.51	ug/L	5	70.2	61-123	6/3/2015	6/5/2015
Indeno[1,2,3-cd]pyrene	3.61	ug/L	5	72.2	51-137	6/3/2015	6/5/2015
Naphthalene	3.02	ug/L	5	60.4	53-120	6/3/2015	6/5/2015
Phenanthrene	3.48	ug/L	5	69.6	60-124	6/3/2015	6/5/2015
Benzo[b]fluoranthene	3.65	ug/L	5	73.0	60-139	6/3/2015	6/5/2015

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Chrysene	4.01	ug/L	5	80.2	8.6	0-50	6/3/2015	6/5/2015
Acenaphthene	3.40	ug/L	5	68.0	9.2	0-50	6/3/2015	6/5/2015
Acenaphthylene	3.34	ug/L	5	66.8	10.4	0-50	6/3/2015	6/5/2015
Anthracene	3.72	ug/L	5	74.4	8.1	0-50	6/3/2015	6/5/2015
Benzo(ghi)perylene	3.82	ug/L	5	76.4	7.6	0-50	6/3/2015	6/5/2015
Benzo[a]anthracene	4.68	ug/L	5	93.6	8.9	0-50	6/3/2015	6/5/2015
Benzo[a]pyrene	3.68	ug/L	5	73.6	8.2	0-50	6/3/2015	6/5/2015
2-Methylnaphthalene	3.83	ug/L	5	76.6	3.5	0-50	6/3/2015	6/5/2015
Benzo[k]fluoranthene	3.76	ug/L	5	75.2	7.4	0-50	6/3/2015	6/5/2015
Pyrene	4.10	ug/L	5	82.0	6.3	0-50	6/3/2015	6/5/2015
Dibenz[a,h]anthracene	3.95	ug/L	5	79.0	7.6	0-50	6/3/2015	6/5/2015
Fluoranthene	4.08	ug/L	5	81.6	6.8	0-50	6/3/2015	6/5/2015
Fluorene	3.88	ug/L	5	77.6	10.0	0-50	6/3/2015	6/5/2015
Indeno[1,2,3-cd]pyrene	3.90	ug/L	5	78.0	7.7	0-50	6/3/2015	6/5/2015

Comments:

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Batch #: 150529010
Project Name: SVL #W5E0558

Analytical Results Report

Quality Control Data

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Naphthalene	3.30	ug/L	5	66.0	8.9	0-50	6/3/2015	6/5/2015
Phenanthrene	3.78	ug/L	5	75.6	8.3	0-50	6/3/2015	6/5/2015
Benzo[b]fluoranthene	4.05	ug/L	5	81.0	10.4	0-50	6/3/2015	6/5/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2-Methylnaphthalene	ND	ug/L	0.01	6/3/2015	6/5/2015
Acenaphthene	ND	ug/L	0.01	6/3/2015	6/5/2015
Acenaphthylene	ND	ug/L	0.01	6/3/2015	6/5/2015
Anthracene	ND	ug/L	0.01	6/3/2015	6/5/2015
Benzo(ghi)perylene	ND	ug/L	0.01	6/3/2015	6/5/2015
Benzo[a]anthracene	ND	ug/L	0.01	6/3/2015	6/5/2015
Benzo[a]pyrene	ND	ug/L	0.01	6/3/2015	6/5/2015
Benzo[b]fluoranthene	ND	ug/L	0.01	6/3/2015	6/5/2015
Benzo[k]fluoranthene	ND	ug/L	0.01	6/3/2015	6/5/2015
Chrysene	ND	ug/L	0.01	6/3/2015	6/5/2015
Dibenz[a,h]anthracene	ND	ug/L	0.01	6/3/2015	6/5/2015
Fluoranthene	ND	ug/L	0.01	6/3/2015	6/5/2015
Fluorene	ND	ug/L	0.01	6/3/2015	6/5/2015
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.01	6/3/2015	6/5/2015
Naphthalene	ND	ug/L	0.01	6/3/2015	6/5/2015
Phenanthrene	ND	ug/L	0.01	6/3/2015	6/5/2015
Pyrene	ND	ug/L	0.01	6/3/2015	6/5/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Login Report

Customer Name: HALEY AND ALDRICH
400 E. VAN BUREN ST
PHOENIX AZ 85004

Order ID: 150529010
Order Date: 5/29/2015

Contact Name: LAUREN CANDREVA
Project Name: SVL #W5E0558
Comment:

Sample #: 150529010-001 **Customer Sample #:** NSH-024-052715

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/27/2015
Quantity: 4 **Date Received:** 5/29/2015 11:25:00 AM **Time Collected:** 9:30 AM
Comment:

Test	Lab	Method	Due Date	Priority
PAH 8270D MOSC	M	EPA 8270D	6/10/2015	***Normal (~10 Days)***
VOLATILES 524.3	M	EPA 524.3	6/10/2015	***Normal (~10 Days)***

Sample #: 150529010-002 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Matrix:** Water **Collector:** **Date Collected:** 5/27/2015
Quantity: 1 **Date Received:** 5/29/2015 11:25:00 AM **Time Collected:**
Comment:

Test	Lab	Method	Due Date	Priority
VOLATILES 524.3	M	EPA 524.3	6/10/2015	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	5.8
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

W5E0558

FOR SVL USE ONLY
SVL JOB #

TEMP on Receipt: 3.2°C

CHAIN OF CUSTODY RECORD

Page ___ of ___

SVL Analytical, Inc. • One Government Gulch • Kellogg, ID 83837 • (208) 784-1258 • FAX: (208) 783-0891

Report to Company: HALEY + ALDRICH
Contact: LAUREN CANDREVA
Address: 400 E VAN BUREN ST #545
PHOENIX AZ 85004
Phone Number: 602-760-2450
FAX Number:
E-mail:

Invoice Sent To: REBECCA SAWYER
Contact: GUNNISON COPPER PROJECT
Address: 2999 N 44TH ST #330
PHOENIX AZ 85018
Phone Number: 520-368-1772
FAX Number:
PO#:

Table 1. -- Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil, 4 = Sediment, 5 = Rock, 6 = Rinsate, 7 = Oil
8 = Waste, 9 = Other:

Project Name: EXCELSIOR
Sampler's Signature: Linda Ford

Indicate State of sample origination: AZ

Please take care to distinguish between:
1 and I
2 and Z
5 and S
Ø and O
Thanks!

	Sample ID	Collection Date	Collection Time	Collected by: (Init.)	Misc. Matrix Type (From Table 1)	Misc. No. of Containers	Preservative(s) Unpreserved	HNO_3 Filtered	HNO_3 Unfiltered	HCl	H_2SO_4	NaOH	Other (Specify) ZnAc	Analyses Required METALS (DISSOLVED)	SILICA (DISSOLVED)	ALKALINITY, ANIONS	WET CHEM	NO_2, NO_3	CYANIDE	SULFIDE	TOC, PAH	VOCs (524.3)	RADIOCHEM, ISOTOPES	Rush Instructions (Days)	Comments
1	NSH-Ø24-Ø52715	5/27/15		KF	2	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		METAL/SILICA SAMPLE WAS FILTERED WITH A 0.45µm DISPOSABLE GROUNDWATER FILTER CAPSULE + PRESERVED WITH HNO_3
2																									
3	TRIP BLANK					1																			
4																									
5																									
6																									
7																									SHIPPED UPS OVERNIGHT
8																									1Z 9X8 989 23
9																									1001 267 7
10																									

Relinquished by: Linda Ford	Date: 5/27/15	Time: 1300	Received by:	Date: 5/28/15	Time: 10:00
Relinquished by: J Jacobson	Date: 5-28-15	Time: 7318	Received by:	Date:	Time:

* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

White: LAB COPY Yellow: CUSTOMER COPY

SVL-COC 01/14

SVL RECORDED TIME FROM SAMPLE ID. (9:30)
CF 5/28/15

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
NSH-024-052715	W5E0558-01	Ground Water	27-May-15 09:30	KF	28-May-2015	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Client Sample ID: **NSH-024-052715**
SVL Sample ID: **W5E0558-01 (Ground Water)**

Sampled: 27-May-15 09:30
Received: 28-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.04	mg/L	0.08	0.04		W523006	AS	06/16/15 15:52	U
EPA 200.7	**Calcium**	35.0	mg/L	0.100	0.029		W523006	AS	06/16/15 15:52	
EPA 200.7	Iron	< 0.026	mg/L	0.060	0.026		W523006	AS	06/16/15 15:52	U
EPA 200.7	**Magnesium**	18.3	mg/L	0.20	0.11		W523006	AS	06/16/15 15:52	
EPA 200.7	**Potassium**	2.05	mg/L	0.50	0.17		W523006	AS	06/16/15 15:52	
EPA 200.7	**Silica (SiO2)**	48.5	mg/L	0.17	0.12		W523006	AS	06/16/15 15:52	
EPA 200.7	**Sodium**	23.7	mg/L	0.50	0.05		W523006	AS	06/16/15 15:52	
EPA 200.8	**Antimony**	0.00167	mg/L	0.00300	0.00019		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Arsenic**	0.00252	mg/L	0.00300	0.00027		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Barium**	0.0339	mg/L	0.00100	0.000099		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Beryllium**	0.000082	mg/L	0.00020	0.000048		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Boron**	0.0405	mg/L	0.0050	0.0012		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Cadmium**	0.00008	mg/L	0.00020	0.000072		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Chromium**	0.0054	mg/L	0.0015	0.0004		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Cobalt**	0.00007	mg/L	0.00100	0.000054		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Copper**	0.00796	mg/L	0.00100	0.00015		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Lead**	0.00017	mg/L	0.00300	0.000031		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Manganese**	0.00307	mg/L	0.00100	0.000025		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Molybdenum**	0.189	mg/L	0.00100	0.00009		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Nickel**	0.0011	mg/L	0.0010	0.0004		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Selenium**	0.0029	mg/L	0.0030	0.0006		W521262	KWH	06/02/15 11:59	J
EPA 200.8	**Silver**	0.000032	mg/L	0.000100	0.000021		W521262	KWH	06/02/15 11:59	J
EPA 200.8	Thallium	< 0.000026	mg/L	0.00100	0.000026		W521262	KWH	06/02/15 11:59	U
EPA 200.8	**Uranium**	0.00905	mg/L	0.00100	0.000014		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Vanadium**	0.0036	mg/L	0.0030	0.0009		W521262	KWH	06/02/15 11:59	
EPA 200.8	**Zinc**	0.371	mg/L	0.0050	0.0010		W521262	KWH	06/02/15 11:59	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00004	mg/L	0.00020	0.00004		W523034	STA	06/03/15 10:35	U
Classical Chemistry Parameters										
SM 2320B	**Total Alkalinity**	149	mg/L as CaCO3	1.0			W522092	DKS	05/28/15 13:14	
SM 2320B	**Bicarbonate**	149	mg/L as CaCO3	1.0			W522092	DKS	05/28/15 13:14	
SM 2320B	Carbonate	0	mg/L as CaCO3	1.0			W522092	DKS	05/28/15 13:14	U
SM 2320B	Hydroxide	0	mg/L as CaCO3	1.0			W522092	DKS	05/28/15 13:14	U
SM 2510 B	**Specific conductance**	388	µmhos/cm	5.00			W522160	RS	05/29/15 07:45	
SM 2540 C	**Total Diss. Solids**	263	mg/L	10			W522166	RS	05/29/15 10:00	
SM 4500 H B	**pH @20.0°C**	8.01	pH Units				W522092	DKS	05/28/15 13:14	H5
SM 4500-CN-I	**Cyanide (WAD)**	0.0030	mg/L	0.0100	0.0025		W524060	DG	06/09/15 14:58	J
SM 4500-P-E	Orthophosphate as P	< 0.006	mg/L	0.010	0.006		W522158	MCB	05/29/15 07:27	U
SM 4500-S-F	Sulfide	< 0.39	mg/L	1.00	0.39		W523070	SM	06/03/15 16:55	U
SM 5310B	**Total Organic Carbon**	0.28	mg/L	1.00	0.24		W523163	SM	06/04/15 12:59	J

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Client Sample ID: **NSH-024-052715**
SVL Sample ID: **W5E0558-01 (Ground Water)**

Sample Report Page 2 of 2

Sampled: 27-May-15 09:30
Received: 28-May-15
Sampled By: KF

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	27.1	mg/L	2.00	0.56	10	W522124	MCE	05/28/15 10:53	D2,M3
EPA 300.0	**Fluoride**	3.62	mg/L	0.100	0.022		W522124	MCE	05/28/15 10:40	
EPA 300.0	**Nitrate as N**	1.10	mg/L	0.050	0.008		W522124	MCE	05/28/15 10:40	
EPA 300.0	Nitrite as N	< 0.014	mg/L	0.050	0.014		W522124	MCE	05/28/15 10:40	U
EPA 300.0	**Sulfate as SO4**	14.8	mg/L	0.30	0.05		W522124	MCE	05/28/15 10:40	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.35 meq/L Anion Sum: 4.32 meq/L C/A Balance: 0.38 % Calculated TDS: 267 TDS/cTDS: 0.98 TDS/eC: 0.68

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Dissolved)								
EPA 200.7	Aluminum	mg/L	<0.04	0.04	0.08	W523006	16-Jun-15	U
EPA 200.7	Calcium	mg/L	<0.029	0.029	0.100	W523006	16-Jun-15	U
EPA 200.7	Iron	mg/L	<0.026	0.026	0.060	W523006	16-Jun-15	U
EPA 200.7	Magnesium	mg/L	<0.11	0.11	0.20	W523006	16-Jun-15	U
EPA 200.7	Potassium	mg/L	<0.17	0.17	0.50	W523006	16-Jun-15	U
EPA 200.7	Silica (SiO2)	mg/L	<0.12	0.12	0.17	W523006	16-Jun-15	U
EPA 200.7	Sodium	mg/L	<0.05	0.05	0.50	W523006	16-Jun-15	U
EPA 200.8	Antimony	mg/L	<0.00019	0.00019	0.00300	W521262	02-Jun-15	U
EPA 200.8	Arsenic	mg/L	<0.00027	0.00027	0.00300	W521262	02-Jun-15	U
EPA 200.8	Barium	mg/L	<0.000099	0.000099	0.00100	W521262	02-Jun-15	U
EPA 200.8	Beryllium	mg/L	<0.000048	0.000048	0.00020	W521262	02-Jun-15	U
EPA 200.8	Boron	mg/L	<0.0012	0.0012	0.0050	W521262	02-Jun-15	U
EPA 200.8	Cadmium	mg/L	<0.000072	0.000072	0.00020	W521262	02-Jun-15	U
EPA 200.8	Chromium	mg/L	<0.0004	0.0004	0.0015	W521262	02-Jun-15	U
EPA 200.8	Cobalt	mg/L	<0.000054	0.000054	0.00100	W521262	02-Jun-15	U
EPA 200.8	Copper	mg/L	<0.00015	0.00015	0.00100	W521262	02-Jun-15	U
EPA 200.8	Lead	mg/L	<0.000031	0.000031	0.00300	W521262	02-Jun-15	U
EPA 200.8	Manganese	mg/L	<0.000025	0.000025	0.00100	W521262	02-Jun-15	U
EPA 200.8	Molybdenum	mg/L	<0.00009	0.00009	0.00100	W521262	02-Jun-15	U
EPA 200.8	Nickel	mg/L	<0.0004	0.0004	0.0010	W521262	02-Jun-15	U
EPA 200.8	Selenium	mg/L	<0.0006	0.0006	0.0030	W521262	02-Jun-15	U
EPA 200.8	Silver	mg/L	<0.000021	0.000021	0.000100	W521262	02-Jun-15	U
EPA 200.8	Thallium	mg/L	<0.000026	0.000026	0.00100	W521262	02-Jun-15	U
EPA 200.8	Uranium	mg/L	<0.000014	0.000014	0.00100	W521262	02-Jun-15	U
EPA 200.8	Vanadium	mg/L	<0.0009	0.0009	0.0030	W521262	02-Jun-15	U
EPA 200.8	Zinc	mg/L	<0.0010	0.0010	0.0050	W521262	02-Jun-15	U
Metals (Filtered)								
EPA 245.1	Mercury	mg/L	<0.00004	0.00004	0.00020	W523034	03-Jun-15	U
Classical Chemistry Parameters								
SM 2320B	Total Alkalinity	mg/L as CaCO3	0.76		1.0	W522092	28-May-15	J
SM 2320B	Bicarbonate	mg/L as CaCO3	0.76		1.0	W522092	28-May-15	J
SM 2320B	Carbonate	mg/L as CaCO3	0		1.0	W522092	28-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0		1.0	W522092	28-May-15	U
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W522166	29-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0025	0.0025	0.0100	W524060	09-Jun-15	U
SM 4500-P-E	Orthophosphate as P	mg/L	<0.006	0.006	0.010	W522158	29-May-15	U
SM 4500-S-F	Sulfide	mg/L	<0.39	0.39	1.00	W523070	03-Jun-15	U
SM 5310B	Total Organic Carbon	mg/L	<0.32	0.32	1.00	W523163	04-Jun-15	U
Anions by Ion Chromatography								
EPA 300.0	Chloride	mg/L	<0.06	0.06	0.20	W522124	28-May-15	U
EPA 300.0	Fluoride	mg/L	0.024	0.022	0.100	W522124	28-May-15	J
EPA 300.0	Nitrate as N	mg/L	<0.008	0.008	0.050	W522124	28-May-15	U
EPA 300.0	Nitrite as N	mg/L	<0.014	0.014	0.050	W522124	28-May-15	U
EPA 300.0	Sulfate as SO4	mg/L	<0.05	0.05	0.30	W522124	28-May-15	U

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)									
EPA 200.7	Aluminum	mg/L	1.03	1.00	103	85 - 115	W523006	16-Jun-15	
EPA 200.7	Calcium	mg/L	20.4	20.0	102	85 - 115	W523006	16-Jun-15	
EPA 200.7	Iron	mg/L	10.2	10.0	102	85 - 115	W523006	16-Jun-15	
EPA 200.7	Magnesium	mg/L	20.0	20.0	99.8	85 - 115	W523006	16-Jun-15	
EPA 200.7	Potassium	mg/L	20.1	20.0	100	85 - 115	W523006	16-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	9.97	10.7	93.1	85 - 115	W523006	16-Jun-15	
EPA 200.7	Sodium	mg/L	19.0	19.0	99.8	85 - 115	W523006	16-Jun-15	
EPA 200.8	Antimony	mg/L	0.0244	0.0250	97.4	85 - 115	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0251	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0256	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0259	0.0250	103	85 - 115	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0247	0.0250	98.8	85 - 115	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0261	0.0250	104	85 - 115	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0243	0.0250	97.3	85 - 115	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0249	0.0250	99.6	85 - 115	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0250	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0256	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0247	0.0250	98.9	85 - 115	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0254	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0247	0.0250	98.9	85 - 115	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0252	0.0250	101	85 - 115	W521262	02-Jun-15	
EPA 200.8	Silver	mg/L	0.0260	0.0250	104	85 - 115	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0255	0.0250	102	85 - 115	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0245	0.0250	98.1	85 - 115	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0251	0.0250	100	85 - 115	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.0264	0.0250	106	85 - 115	W521262	02-Jun-15	
Metals (Filtered)									
EPA 245.1	Mercury	mg/L	0.00514	0.00500	103	85 - 115	W523034	03-Jun-15	
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	94.6	99.3	95.2	85 - 115	W522092	28-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	90.1	99.3	90.8	85 - 115	W522092	28-May-15	
SM 2510 B	Specific conductance	µmhos/cm	301	306	98.4	90 - 110	W522160	29-May-15	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.154	0.150	103	90 - 110	W524060	09-Jun-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.787	0.786	100	90 - 110	W522158	29-May-15	
SM 4500-S-F	Sulfide	mg/L	2.37	2.50	94.8	80 - 120	W523070	03-Jun-15	
SM 5310B	Total Organic Carbon	mg/L	34.1	34.3	99.4	90 - 110	W523163	04-Jun-15	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.94	3.00	98.1	90 - 110	W522124	28-May-15	
EPA 300.0	Fluoride	mg/L	1.94	2.00	97.0	90 - 110	W522124	28-May-15	
EPA 300.0	Nitrate as N	mg/L	1.98	2.00	98.9	90 - 110	W522124	28-May-15	
EPA 300.0	Nitrite as N	mg/L	2.62	2.50	105	90 - 110	W522124	28-May-15	
EPA 300.0	Sulfate as SO4	mg/L	9.74	10.0	97.4	90 - 110	W522124	28-May-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B	Total Alkalinity	mg/L as CaCO3	147	146	1.1	20	W522092	28-May-15	
SM 2320B	Bicarbonate	mg/L as CaCO3	147	146	1.1	20	W522092	28-May-15	
SM 2320B	Carbonate	mg/L as CaCO3	0	0.00	UDL	20	W522092	28-May-15	U
SM 2320B	Hydroxide	mg/L as CaCO3	0	0.00	UDL	20	W522092	28-May-15	U
SM 2510 B	Specific conductance	µmhos/cm	390	388	0.3	20	W522160	29-May-15	
SM 2540 C	Total Diss. Solids	mg/L	1270	1260	0.4	10	W522166	29-May-15	
SM 2540 C	Total Diss. Solids	mg/L	1610	1600	0.8	10	W522166	29-May-15	
SM 4500 H B	pH	pH Units	6.87	7.03	2.3	20	W522092	28-May-15	R1B

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.10	<0.036	1.00	110	70 - 130	W523006	16-Jun-15	
EPA 200.7	Aluminum	mg/L	1.04	<0.036	1.00	104	70 - 130	W523006	16-Jun-15	
EPA 200.7	Calcium	mg/L	110	89.9	20.0	98.4	70 - 130	W523006	16-Jun-15	M3
EPA 200.7	Calcium	mg/L	175	164	20.0	R > 4S	70 - 130	W523006	16-Jun-15	M3
EPA 200.7	Iron	mg/L	10.2	0.054	10.0	101	70 - 130	W523006	16-Jun-15	
EPA 200.7	Iron	mg/L	9.77	<0.026	10.0	97.7	70 - 130	W523006	16-Jun-15	
EPA 200.7	Magnesium	mg/L	49.0	28.8	20.0	101	70 - 130	W523006	16-Jun-15	
EPA 200.7	Magnesium	mg/L	42.7	24.1	20.0	92.8	70 - 130	W523006	16-Jun-15	
EPA 200.7	Potassium	mg/L	22.1	1.52	20.0	103	70 - 130	W523006	16-Jun-15	
EPA 200.7	Potassium	mg/L	28.7	9.48	20.0	96.1	70 - 130	W523006	16-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	19.7	9.37	10.7	96.9	70 - 130	W523006	16-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	56.9	49.3	10.7	71.4	70 - 130	W523006	16-Jun-15	
EPA 200.7	Sodium	mg/L	29.6	10.3	19.0	101	70 - 130	W523006	16-Jun-15	
EPA 200.7	Sodium	mg/L	51.6	34.8	19.0	88.6	70 - 130	W523006	16-Jun-15	
EPA 200.8	Antimony	mg/L	0.0253	0.00045	0.0250	99.3	70 - 130	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0316	0.00104	0.0250	122	70 - 130	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0579	0.0341	0.0250	95.0	70 - 130	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0281	0.00014	0.0250	112	70 - 130	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0658	0.0384	0.0250	109	70 - 130	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0269	<0.000072	0.0250	107	70 - 130	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0325	0.0056	0.0250	108	70 - 130	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0262	0.00013	0.0250	104	70 - 130	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0428	0.0175	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0253	0.00037	0.0250	99.9	70 - 130	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0276	0.00118	0.0250	106	70 - 130	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0784	0.0558	0.0250	90.6	70 - 130	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0269	0.0017	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0346	0.0027	0.0250	128	70 - 130	W521262	02-Jun-15	
EPA 200.8	Silver	mg/L	0.0251	0.000055	0.0250	100	70 - 130	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0252	<0.000026	0.0250	101	70 - 130	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0476	0.0228	0.0250	98.9	70 - 130	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0304	0.0026	0.0250	111	70 - 130	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.233	0.199	0.0250	R > 4S	70 - 130	W521262	02-Jun-15	
Metals (Filtered)										
EPA 245.1	Mercury	mg/L	0.00102	<0.00004	0.00100	102	70 - 130	W523034	03-Jun-15	
EPA 245.1	Mercury	mg/L	0.00102	<0.00004	0.00100	102	70 - 130	W523034	03-Jun-15	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0990	0.0030	0.100	96.0	75 - 125	W524060	09-Jun-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Classical Chemistry Parameters (Continued)										
SM 4500-P-E	Orthophosphate as P	mg/L	0.510	<0.0058	0.500	102	75 - 125	W522158	29-May-15	
SM 4500-S-F	Sulfide	mg/L	2.33	<0.39	2.50	93.2	80 - 120	W523070	03-Jun-15	
SM 5310B	Total Organic Carbon	mg/L	53.4	<0.32	50.0	106	80 - 120	W523163	04-Jun-15	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	30.4	27.1	3.00	R > 4S	90 - 110	W522124	28-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.57	3.62	2.00	97.6	90 - 110	W522124	28-May-15	
EPA 300.0	Nitrate as N	mg/L	3.16	1.10	2.00	103	90 - 110	W522124	28-May-15	
EPA 300.0	Nitrite as N	mg/L	1.84	<0.014	2.00	92.0	90 - 110	W522124	28-May-15	
EPA 300.0	Sulfate as SO4	mg/L	25.0	14.8	10.0	102	90 - 110	W522124	28-May-15	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.10	1.10	1.00	110	0.1	20	W523006	16-Jun-15	
EPA 200.7	Calcium	mg/L	109	110	20.0	96.3	0.4	20	W523006	16-Jun-15	M3
EPA 200.7	Iron	mg/L	10.3	10.2	10.0	102	0.7	20	W523006	16-Jun-15	
EPA 200.7	Magnesium	mg/L	49.1	49.0	20.0	101	0.2	20	W523006	16-Jun-15	
EPA 200.7	Potassium	mg/L	22.1	22.1	20.0	103	0.2	20	W523006	16-Jun-15	
EPA 200.7	Silica (SiO2)	mg/L	19.7	19.7	10.7	96.2	0.4	20	W523006	16-Jun-15	
EPA 200.7	Sodium	mg/L	29.7	29.6	19.0	102	0.4	20	W523006	16-Jun-15	
EPA 200.8	Antimony	mg/L	0.0248	0.0253	0.0250	97.5	1.8	20	W521262	02-Jun-15	
EPA 200.8	Arsenic	mg/L	0.0331	0.0316	0.0250	128	4.8	20	W521262	02-Jun-15	
EPA 200.8	Barium	mg/L	0.0580	0.0579	0.0250	95.4	0.2	20	W521262	02-Jun-15	
EPA 200.8	Beryllium	mg/L	0.0291	0.0281	0.0250	116	3.6	20	W521262	02-Jun-15	
EPA 200.8	Boron	mg/L	0.0664	0.0658	0.0250	112	1.0	20	W521262	02-Jun-15	
EPA 200.8	Cadmium	mg/L	0.0268	0.0269	0.0250	107	0.1	20	W521262	02-Jun-15	
EPA 200.8	Chromium	mg/L	0.0332	0.0325	0.0250	110	2.0	20	W521262	02-Jun-15	
EPA 200.8	Cobalt	mg/L	0.0273	0.0262	0.0250	109	4.2	20	W521262	02-Jun-15	
EPA 200.8	Copper	mg/L	0.0448	0.0428	0.0250	109	4.4	20	W521262	02-Jun-15	
EPA 200.8	Lead	mg/L	0.0257	0.0253	0.0250	101	1.5	20	W521262	02-Jun-15	
EPA 200.8	Manganese	mg/L	0.0285	0.0276	0.0250	109	3.4	20	W521262	02-Jun-15	
EPA 200.8	Molybdenum	mg/L	0.0746	0.0784	0.0250	75.4	5.0	20	W521262	02-Jun-15	
EPA 200.8	Nickel	mg/L	0.0283	0.0269	0.0250	106	4.9	20	W521262	02-Jun-15	
EPA 200.8	Selenium	mg/L	0.0371	0.0346	0.0250	138	7.0	20	W521262	02-Jun-15	M1
EPA 200.8	Silver	mg/L	0.0244	0.0251	0.0250	97.5	2.6	20	W521262	02-Jun-15	
EPA 200.8	Thallium	mg/L	0.0257	0.0252	0.0250	103	2.0	20	W521262	02-Jun-15	
EPA 200.8	Uranium	mg/L	0.0475	0.0476	0.0250	98.9	0.0	20	W521262	02-Jun-15	
EPA 200.8	Vanadium	mg/L	0.0308	0.0304	0.0250	113	1.4	20	W521262	02-Jun-15	
EPA 200.8	Zinc	mg/L	0.255	0.233	0.0250	R > 4S	9.0	20	W521262	02-Jun-15	M3
Metals (Filtered)											
EPA 245.1	Mercury	mg/L	0.00101	0.00102	0.00100	101	1.0	20	W523034	03-Jun-15	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	0.0990	0.100	99.0	3.0	20	W524060	09-Jun-15	
SM 4500-P-E	Orthophosphate as P	mg/L	0.501	0.510	0.500	100	1.8	20	W522158	29-May-15	
SM 4500-S-F	Sulfide	mg/L	2.41	2.33	2.50	96.4	3.4	20	W523070	03-Jun-15	
SM 5310B	Total Organic Carbon	mg/L	51.6	53.4	50.0	103	3.5	20	W523163	04-Jun-15	

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Excelsior Mining Corp.
2999 N. 44th St. #300
Phoenix, AZ 85018

Project Name: Gunnison Copper 2015
Work Order: **W5E0558**
Reported: 22-Jun-15 09:02

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Anions by Ion Chromatography											
EPA 300.0	Chloride	mg/L	29.2	30.4	3.00	R > 4S	3.8	20	W522124	28-May-15	D2,M3
EPA 300.0	Fluoride	mg/L	5.62	5.57	2.00	100	0.9	20	W522124	28-May-15	
EPA 300.0	Nitrate as N	mg/L	3.24	3.16	2.00	107	2.4	20	W522124	28-May-15	
EPA 300.0	Nitrite as N	mg/L	1.92	1.84	2.00	95.8	4.1	20	W522124	28-May-15	
EPA 300.0	Sulfate as SO4	mg/L	25.4	25.0	10.0	105	1.3	20	W522124	28-May-15	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
J	The reported value is less than the Reporting Limit (MRL, CRDL) but greater than or equal to the MDL. Results closer to the MDL have increased relative uncertainty.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
R1B	RPD exceeded the method acceptance limit.
U	Less than MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:
AZ:0538, **CA**:2080, **FL**(**NELAC**):E87993, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **WA**:C573